

THE MODERN HOSPITAL

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HOME FOR TUBERCULOUS ON SAN FRANCISCO BAY

SET in the foothills overlooking the Livermore Valley and about thirty-five miles inland from the fogs of the San Francisco Bay

region lies Arroyo Sanatorium. The name and the place little suggest the public character of the institution, for it is a county hospital, taking the tuberculosis cases of Alameda County, that large political unit which contains the cities of Oakland, Alameda, and Berkeley, on the east side of San Francisco Bay. The buildings are located on a hillside of the Arroyo del Valle Creek; hence the name. With a winding road giving a gradual ascent through a beautiful pear orchard to the main buildings, and with an altitude of a thousand feet in a county that is practically at sea level,

ARROYO SANATORIUM, LIVERMORE, ALAMEDA COUNTY, CALIFORNIA

Part I.—Its Architecture and Environment. By Henry H. Myers.

Part II.—Its Medical Therapy. By Chesley Bush, M.D.

Part III.—Its Occupational Therapy. Olivia Lee Tiedebohl.

the choice of location is, indeed, a commendable one. The approach after nightfall with the thousand little electric lights

twinkling in the distance gives the impression of a fairy castle.

The buildings are grouped in two units to good advantage. Surrounding the service building are the medical and administration building, the main infirmary, and two dormitory buildings. Higher up on the hill and removed from within sound of the first unit lie the children's building, the nurses' home, the female employees' building and the male employees' building. The latter contains a kitchen and dining rooms for the children and staff. Each unit is complete within itself,



The main unit of the Arroyo Sanatorium, Livermore, Cal., which consists of infirmary, service buildings and dormitory. The buildings are beautifully located on a hillside and grouped in two units. The children's unit is higher up the hill.

but for administrative purposes all are operated conjointly to save expense. The second unit has just recently been completed, and to date the main service building has taken care of both patients and staff.

The project is still in the formative period, for although the initial building is completed and in use, other buildings are now in course of construction, while several more are planned for the immediate future.

PART I.—ARROYO SANATORIUM—ITS ARCHITECTURE AND ENVIRONMENT

BY HENRY H. MYERS, ARCHITECT

THE idea of a separate institution for tuberculous patients was the natural outcome of a campaign by the California State Board of Health for bettering the conditions of these patients in their original surroundings at the county's general hospital near San Leandro, Cal.

The selection of the new site met with instant favor from Mrs. E. L. M. Tate-Thompson, who, as director of the bureau of tuberculosis of the state board of health, had conducted the fight for betterment. Indeed no one who has visited the site can fail to be strongly and favorably impressed. Consisting of about fifteen acres of

for the work must be largely used for buildings, and the grading expense kept as low as possible. For this reason the buildings on the property have been divided into two groups to accommodate the available building locations.

In one of these groups are located all the buildings for housing and care of adult patients, while in the other group are the buildings for housing nurses, staff, and other employees, as well as a building for tuberculous children.

The orientation of the site places the apparent frontage of the buildings to the north, overlooking the valley, but necessarily this has been



The nurses' cottage has ten bedrooms, each provided with a sleeping porch.

wooded hill land, it lies at the southern rim of the Livermore Valley, with a sufficient elevation to give a complete outlook across the valley floor, while in the immediate foreground is the picturesque, tree-fringed Arroyo Valle Creek, from which the sanatorium gets its name.

In planning the buildings, it was strongly impressed upon the architect that the appropriation

subordinated to some extent so that full advantage of the southern exposure may be taken.

In the lower or patients' group are located five buildings, consisting of a combined medical and administration building, an infirmary building for bed patients, two dormitories for ambulatory patients, and a service or domestic building containing dining rooms and kitchen.

In the upper group are located the children's building, nurses' cottage, women employees' building, superintendent's dwelling, and combined service and male employees' building, in which are the sleeping quarters for male employees and the kitchen and dining room for the staff and employees.

The relative location of buildings in the lower group may probably be better understood if the reader will picture in his mind axes lines conforming to the letter T, the stem of the letter representing the main axis running approximately north and south, on which is located the service building and the two dormitories, while on the cross bar of the letter are located the infirmary and medical building (the latter balancing on the main axis), and a location for a future additional infirmary building.

The site of this group while reasonably level has a sufficient slope to the north so that from the verandas of the dormitories the occupants may readily see over the roof of the infirmary building and retain a view of the valley. It is this

In construction, all the buildings of the two groups, excepting the medical building, are of frame, but to eliminate as much fire hazard as possible they are finished on the exterior with cement stucco and with roofing of asphalt felt with a crushed red brick covering.

The medical building, on account of its position between the present and future infirmary buildings, is constructed as a fire stop with masonry walls. All cementing on walls is painted in light greyish tones with wood trimmings in gray green.

The medical building consists of two stories and basement. On the first floor are the administrative offices and public reception room with private offices and examination rooms for the superintendent, resident physician, and head nurse. On the second floor are the x-ray department, operating room, preparing and sterilizing room, drug store, eye, ear, nose, and throat room, and dentist's office and laboratory. In the basement are the morgue, autopsy room, and laboratories.

The infirmary building is two stories in height,



The women's ward in the North Dormitory, which affords an enchanting view of the hills.

feature of the site that gives it its charm. From no point is the valley view wholly shut out. Equally charming, however, is the southern view toward the wooded hills and canyons which form the background of the group and protect it on three sides from winter storms and wind. It is in this background that the upper group of buildings is placed.

with the power plant in the basement. This building is divided into three sections. The central section on each floor has its nurses' station, diet kitchen with locker rooms, bathroom, and toilets, as well as record rooms, medical office, and sewing room. The westerly section is subdivided into eleven private rooms on each floor, while the easterly section has two open wards



The Children's Building is far up the hillside, near the nurses' home. It is a great, roomy place, with wide sun porches.

on each floor, of five- and six-bed capacity each, with adjoining isolation rooms.

All rooms for patients, both in single rooms and wards, are made as open as possible, with all openings screened, while around the entire building are wide, open, covered porches with canvas awnings or drop curtains for use in stormy weather.

Dormitories for Male Patients

The two dormitories are designed for male ambulatory patients, but pending the construction of the second infirmary building are being used partly for bed patients. They are one story structures containing two wards of twenty beds each. At the center of the building is a large, well lighted, steam-heated living room or day hall, with an open fireplace. The wards are at opposite sides of the day hall and connected with it.

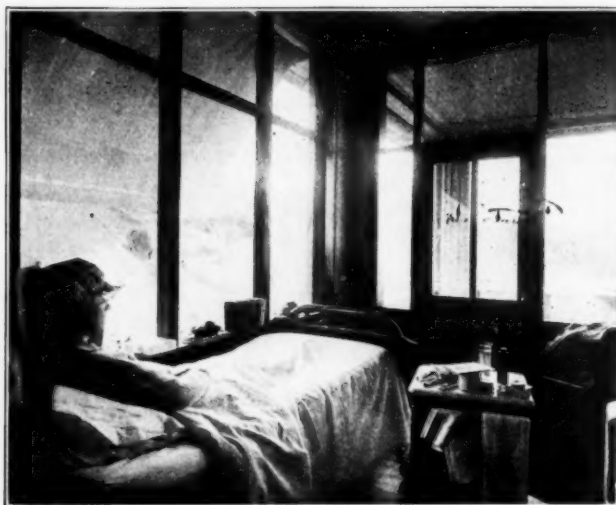
The wards are open on the north and south sides, protected with wire screening and have porches ten feet wide the full length of each side. The north porches have permanent roofs, but the southerly porches are arranged with canvas awnings for protection against sun and rain, which can be converted to drop curtains in stormy weather, effectually protecting all openings.

Connecting with each of the wards at the opposite end from the day hall is a large, heated dressing room with lockers for patients' clothing, and fitted with basins, dental lavatories, and drinking fountains. Connecting with each dressing room is a semi-detached toilet room, bath and shower room, furnished with modern plumbing, magnesite floors, and enamel cement walls.

The service building in the lower group con-

tains the large kitchen, serving room, and dining rooms for male and female patients, together with storeroom, refrigerator room, and ice plant. The service is of the cafeteria system with double steam serving tables and separate entrances and service to the male and female patients.

In the upper group, the children's building is a two-story structure planned for the boys on the second floor and girls on the first, with an infants' ward and nurses' room in connection. Two wards for boys, with a capacity of twelve beds, are provided. The girls' ward contains six beds and the infants' ward four beds. Besides these wards,



A view of all the big outdoors is the constant delight of this patient in a private room in the infirmary.

provision is made for diet kitchen, nurses' station and record room, toilet and bathroom, and an open-air class room.

The nurses' cottage contains a large living room and buffet kitchen and ten bedrooms, each provided with a sleeping porch and with baths, toilets, and the usual conveniences.

Roomy Building for Employees

The women employees' building has two stories, the first floor containing four suites of bedrooms, bath, and sleeping porches. The second floor contains eight single bedrooms with a large living room, toilets, bath, and showers.

The service and male employees' building is two stories in height and contains besides the kitchen, serving room, and store room, three large dining rooms and sleeping quarters for seventeen employees, together with tub and shower baths, and toilets. A recreation room is provided in connection with the bedrooms.

The interior of all structures, with one or two exceptions, are plastered. All toilets and baths have magnesite or tile floors, and are wainscoted with enameled cement, as are all kitchens and

serving rooms. All other rooms and corridors have maple floors, and all interior finish throughout is of Douglas fir. Some parts are finished in white enamel paint and others with stain and varnish.

Hot water and steam are distributed throughout the grounds and supplied to each building in both groups. All parts are electrically lighted

and have intercommunicating and long distance telephone connections.

The future building program includes the construction of an additional eighty-bed infirmary, a detached power house with laundry, shops, and garage, and the development of an improved water supply, reservoirs, and a fire protective system.

PART II.—ARROYO SANATORIUM—ITS MEDICAL THERAPY

BY CHESLEY BUSH, MEDICAL DIRECTOR

PATIENTS of Arroyo Sanatorium must be residents of Alameda County for one year before being eligible for admission. This admission work has been done by the Alameda County Society for the Study and Prevention of Tuberculosis, which maintains offices and clinics in Oakland. There patients are recommended for admission and patients are followed up after discharge—a regular monthly visit being made to the clinic by those discharged for examination or advice. Recently the various charitable and medical organizations have grouped themselves together in a Public Health Center, with which the

The culinary department for the patients is operated on the cafeteria plan. Those patients who are able to go to their meals enter the service building hallway, where they receive trays and wrapped knives, forks, and spoons. Then passing along a steam table in the service room, they pick up their food just as in a city cafeteria, and enter a dining room. There they are seated at small tables with vitrolite tops, four to a table. On passing out they leave their paper napkins in a special bag maintained for that purpose at the doorway. This bag is afterward taken to the incinerator by one of the patients. Those patients who are not temperature free and who are not allowed to go to their meals are served from diet kitchens, one on each floor of the infirmary building, and one in the north dormitory building. The cafeteria plan has proved very cleanly, feasible, attractive, and labor saving. The one objection is that patients are apt to hurry through their meals in order that the various courses may not get cold. The culinary department is under the management of Miss Alice Heinz, a very competent, trained dietitian.

The nursing staff is in charge of Mrs. Tamar Milne. There are a dozen graduate and practical nurses on the staff. Under the permission of the



This is the corner of the infirmary where the nurses keep their records of cases. Note the charts on the wall.

Anti-Tuberculosis Society will be allied. This organization will have branches in the various parts of the county, and all cases of tuberculosis applying will be followed up so that the work of the sanatorium will constantly represent the result of an up-to-date survey of the county. Within the last few months, a social service department has been organized within the sanatorium itself, for the study of the patients' special problems and home conditions. This department is in charge of Mrs. W. E. A. Young. There will shortly be one hundred and fifty patients in the institution.



The patients' dressing room in the North Dormitory.



From their beds, the patients in the infirmary have an alluring view of the hills.

State Board of Health and with the cooperation of the Bureau of Tuberculosis it is planned to institute a training school for young women who have been tuberculous or who desire to prepare themselves for work in other state subsidized hospitals. The nurses' home is a large, airy building, with a central sitting room and large fireplace. The rooms open with French windows upon sleeping-porches where the nurses can roll their beds at will. The building is at least one-quarter of a mile from the main institution so that the nurses are in no way bothered by the patients.

Patients Publish Paper

The necessity of keeping up the morale of the patients is recognized and every effort is made to stimulate outside interests. A little monthly paper called *The Stethoscope* is edited and published by and for the patients. The newspaper office is in the basement of the south dormitory building and is a very busy place.

Plans are under way for installing an electrically driven printing press, as an adjunct to the occupational work. The large, delightful room shown in one of the pictures is used as an amusement pavilion, and a moving picture show for which films are supplied free by the county, is a regular weekly program. There is a piano, a phonograph, and a number of card tables, and amateur entertainments are brought out from Oakland at various intervals during the year.

Occupational Therapy Inaugurated

The occupational therapy department under the auspices of the California Tuberculosis Society and under the direct supervision of Miss Olivia Lee Tiedebohl has been in operation since June 1. To date no attempt has been made to do vocational

work other than having the patients select the various lines of occupational work which appeal to them. Those having artistic talents have been led along such lines, and several workers with oil colors are now producing work of considerable merit. Reed basketry has occupied the attention of the men who are fitted for that sort of work; raffia and matting basketry have been studied by a number of bed-patients, and bead necklaces have inspired the interest of both men and women. Embroidery and crochet work, always favorite occupations with tuberculous women, have been further stimulated. Numerous articles produced by the patients have been sold, one-half of the money thus derived going to the patient, and the other half being used to purchase further materials. The work has psychologically been of great benefit to the patients. It is described in detail in the article which follows.



This showcase displays some of the artistic handiwork done in the occupational therapy department of Arroyo Sanatorium.

Individual medical attention is given each of the patients from the time of admission into the infirmary building until their discharge, and even afterward. As the physical condition of the patients improves within the institution, they are transferred from building to building until they reach a dormitory where no bed patients are kept and all must go to their meals. They then become the so-called "ambulant" type, but provision is made for taking care of them during "bad spells" by removing them temporarily to the neighborhood of a diet kitchen. All recognized methods of combating the tuberculous infection are used, and all sanitary precautions are taken to prevent droplet contamination while coughing. The sputum is carefully taken away to the incinerator regularly. Any violation of the rules by a patient is strictly watched and incorrigible patients are sent away.

Arroyo Sanatorium is a very good California

example of the county unit method of handling a state tuberculosis problem, and is rapidly becoming a model of its kind. Few weeks go by that

Arroyo Sanatorium does not receive applications for admittance from people living outside of Alameda County.

PART III.—OCCUPATIONAL THERAPY AT ARROYO SANATORIUM

BY OLIVIA LEE TIEDEBOHL, SUPERVISOR OF OCCUPATIONAL THERAPY

PERHAPS never before in the history of modern medicine has the subject of occupational therapy been given such close attention by the physician as today, especially as it is applied to patients in modern tuberculosis sanatoriums.

Occupational therapy was installed at the Arroyo Sanatorium last June, by the California Tuberculosis Society. It was put under the supervision of Mrs. E. L. M. Tate-Thompson, director of the Bureau of Tuberculosis of the State Board of Health. The writer, who is giving the subject unlimited thought and study in an endeavor to analyze it from every angle, was chosen director.

While occupational therapy or handcraft has been attempted in the past in tuberculosis institutions, it has met with comparatively little success, due perhaps to the lack of knowledge as to the proper procedure in applying the work to the

complete abandonment of the handcrafts, while in truth occupational therapy was not at fault, but rather, poor judgment was exercised in directing the work, a thing which could not possibly occur if the subject were properly understood.

The physician and the aide must closely observe the effect produced upon the patient by the work, in order to ascertain the beneficial results. For it must be borne in mind that the work is being done for its therapeutic value, for the moral and mental uplift of the patients, and to bring to them comfort and cheer during the trying hours of convalescence.

In addition, the work by its very nature proves to be an asset to them in future years, inasmuch as it is both highly constructive and instructive in application. One of the principal aims should be to keep alive the patient's interest in life and



This recreation room has everything necessary for the enjoyment of the patients. They may read, listen to the phonograph, play the piano, dance, or simply sit by the grate with its cheery blaze.

requirements of the tuberculous, as well as ignorance of the proper type of work and the time limit for patients to be allowed to work. A tendency to overwork the patients has often caused

its activities. To prevent any chronic apathy which might creep in during the long illness, he must be kept mentally fertile and happy during the months required to effect a cure. In no way

is the work at Arroyo Sanatorium allowed to interfere with the close observance of rest hours.

Occupational therapy proves to be a great aid in helping to produce a higher morale in institutional life. In most cases at a county institution, it is the patient's first opportunity to cultivate his finer senses, as his love of the beautiful and artistic has necessarily been stifled in his effort to earn a living.

Subjects Carefully Selected

By careful selection of subjects adaptable to the physical condition and capacity of the individual patients, highly successful results may be attained. The teacher or aide should create a properly balanced interest and enthusiasm, and keep it stimulated by providing an attractive type of work. She should also assist in establishing an atmosphere of cheer which will divert the thoughts of the patients from physical, domestic and financial difficulties, and at the same time help to build that most wonderful of structures, character.

It has been aptly said by one eminent physician, "Making the cure in tuberculosis is not so much one of medicine as of character." Occupational therapy, carefully planned and judiciously applied, can be of inestimable value to the physician in his efforts to effect a cure. To cite one case under my personal observation: a man who was very much discouraged was admitted to the Arroyo Sanatorium and when asked if he would enjoy making a basket said, "Do you think it could possibly hurt me? Is there any danger of a fellow getting worse?" It was not difficult to appreciate his fear. I set about to cheer him, and we chatted and started on our way in basketry. Within a few days I observed a change in the man. He was quite my cheeriest pupil. He responded rapidly to the prescribed treatment of the institution, his progress is such that he is now an ambulant patient, and he has proved to be my most promising pupil in making beautiful baskets. While the condition of his lungs was not an alarming one, personally I believe that occupational therapy applied at the psychological, vital moment proved valuable in this case.

Summary of Course

Perhaps a brief *résumé* of the course and procedure of our work at Arroyo Sanatorium will be of interest. It has been our endeavor to teach subjects not very difficult or taxing, nor requiring a long period of time for completion, as this often becomes monotonous to even a normal person. Much care has been given to purchasing pretty and attractive materials, and a variety of sub-

jects congenial to the individual tastes has been provided. To the extent of advisability, the patients are permitted to choose their own work and colors, no thought being made on my part to dominate their selection of colors. The selection is directed by the teaching of color harmony in a very elementary way.

Teacher Should Study Patient

A personal study of the patient will enable the teacher to select the proper article for the beginner, be it beads, baskets, or any one of the various subjects taught. A careful record is kept of work done and materials given out. At Arroyo Sanatorium seventy-five per cent of the work is done by bed patients. When teaching in the dormitories, while passing from bed to bed, ample opportunity is afforded to instruct the pupils in color, and to explain in a very simple manner the relation of colors one to the other, and color combinations. I endeavor to entertain the men by discussing current events, the origin and history of basketry or textiles, or even chatting about some local event—the main object being to hold interest and to give to the work that personal touch which wins confidence. The deepest pride is exhibited by the men in their work of making beautiful trays, close-woven raffia and matting baskets, book ends, and a variety of novelties; while the women show keenest interest in bead work, stitchery, hand-painting, and basketry.

The articles made have an intrinsic value and have found a ready market, in fact, we always have orders to fill. The sales of these articles have produced a marked effect upon the patients by creating enthusiasm and an incentive to continue the work. Morning classes for ambulant patients are held in the airy, sunny, recreation room, and in a short time the place has taken on the pleasant atmosphere of a studio. The work tables have homemade baskets upon them filled with flowers, and there is something very cheerful about the whole setting. A well appointed and attractive work shop is of inestimable value in this work.

Pupils Work One Hour

The classes are of one-hour periods, as pupils are not permitted to work beyond one hour, except when permitted by Dr. Chesley Bush, medical director. The patients chat and appear happy while at work, never gossiping or complaining about physical symptoms. The reed basketry which is being done by the ambulant men patients is most creditable. Waste paper baskets, firewood baskets, and charming flower baskets all are being made and sold, as well as

other novelties in wicker. The subjects being taught are all kinds of needlework, matting, basketry, raffia and reed basketry, textile weaving, jesso or polychrome work, chair caning, bead work, pingograft, water colors, hand-painting, and many lovely novelties. The articles are very well made and quite charming. Within a short time many subjects will be introduced, including classes in shorthand, bookkeeping, Spanish, and English.

Work Must Be Standardized

I insist that the work done be standardized, have a professional appearance, and be so attractive that the articles will sell on merit alone, and not for charity. It must be understood that an institution doing this work on any scale must necessarily dispose of its wares. This is by no means the object of occupational therapy, but why not have this a feature of the work? Does it not kindle a man's hope and often restore self-respect to know that, though handicapped, he has an earning capacity always, and is still capable of some usefulness? If we can educate the tuberculous patient, who perhaps has always engaged in manual labor and never can return to his former occupation, so that it will be less difficult for him to attempt a new field of labor better

adapted to his condition, that education is surely of great importance. This training of the mind and fingers will enable him to enter a new occupation without serious difficulty.

Enriches Institutional Life

Occupational therapy therefore has a more important work to perform than merely to amuse the patient during a period of convalescence. The work must be given its proper place and dignity, since it is a progressive step in institutional life. The outlook is very promising and the work will be found to fulfill its mission if conducted along conservative and sensible lines. It has been of inestimable value in the military hospital, and should be made equally valuable in the civilian institution.

To-day

So here hath been dawning another blue day!
Think, wilt thou let it slip useless away.
Out of Eternity this new day was born;
Into Eternity at night will return.

Behold it afore time no eye ever did;
So soon it forever from all eyes is hid.

Here hath been dawning another blue day:
Think, wilt thou let it slip useless away.

Thomas Carlyle.



A view of the main unit which consists of the infirmary, service and dormitory buildings, and the beautifully laid out grounds with the background of hills.

THE HOSPITAL AND THE COMMUNITY*

BY CHRISTOPHER G. PARNALL, M.D., MEDICAL SUPERINTENDENT AND DIRECTOR, UNIVERSITY HOSPITAL, ANN ARBOR, MICHIGAN

THERE should be a better understanding on the part of the general public of the problems and activities of the hospital, for such an understanding will lead inevitably to better service on the part of the hospital and to an increased efficiency which will show itself in better support from the people. The hospital will thus be enabled to meet more adequately the demands made upon it, and the public will come to understand the place the hospital should occupy in its everyday life.

The very word "hospital" implies a community interest. Originally hospitals were places for the entertainment of or shelter for guests. Later, the word was applied as a name to institutions for the refuge of the needy or infirm. Even now the word "hospital" is defined as an institution or place in which the sick or injured are given medical or surgical care, commonly in whole or in part at public expense or by charity. While the hospital has always commanded a certain degree of public interest, still it has usually been only a comparatively small group of people who have concerned themselves in the possibilities for service of such an institution and have contributed to its support.

Indifference of the Public

The general public has little knowledge, indeed, of the plan of operation or of the activities of the hospital. To most people enjoying reasonably good health, the hospital is simply a place where the sick are given medical attention. The real life of the hospital has never been revealed to them. They have had no occasion, personally, to inquire into the field of hospital service, and consequently when, finally, unforeseen illness comes to them or to their families, they are not prepared to realize to what extent the hospital may really become a part of their lives. Largely because of this semi-indifference of the public, the hospital has failed in its greatest opportunities and, as a direct result, the people have not enjoyed the service the hospital could well have furnished in the way of better health, increased efficiency, and comfort.

In this country, the early hospitals were established largely through private philanthropy and supported by voluntary contribution. These hos-

pitals provided for the care of the indigent or the so-called "worthy poor," and most of them were fairly well administered. They rendered a distinct service in the care of the class of patients which they received. Little wonder, however, that the hospital, in the minds of most of the people, became a place to be avoided to the last extremity. The care at the best was only tolerable and the mortality was much higher than that of cases treated in private homes. This, of course, was inevitable when we realize that nothing was known of the cause of communicable diseases and infections and really it is a matter of some wonder that recoveries were as frequent as they were. The well-to-do, when ill, were attended in their homes. Aside from its function of caring for the sick within its walls, there was practically no attempt on the part of the hospital to extend its influence outside, at least to any great extent.

Growth of Dispensary and Clinic

Public dispensaries were established in a few instances, the Philadelphia dispensary being the oldest. Later, a dispensary was established in New York, and the Boston dispensary opened in 1796. The work of the early dispensary was limited entirely to the care of the poor who applied for relief. As the name implied, the chief function was the gratuitous furnishing of medicine. The clinic, having for its object the diagnosis of disease conditions, was a later development, having its origin in the old dispensary. Showing its limitations as a public health agency, it is interesting to note the rule of the Boston Dispensary, "that persons suffering from venereal disease or from the effects of alcohol should not be treated by the dispensary, as being the victims of their own sensual indulgence."

In the light of Dr. Richard Cabot's recent statement that, of one hundred and fifty or more known diseases, only six or eight are benefited by the administration of medicine, it can readily be seen that the real usefulness of the old dispensary was very limited indeed. However, as before indicated, the modern clinic has developed from the dispensary. Now, instead of supplying medicine, the chief function of the dispensary is to furnish accurate diagnoses of disease conditions and advice as to the best methods of living to overcome them.

* Medical lecture in summer school series, University of Michigan, July 15, 1919.

In 1800, there were three dispensaries in the United States. A century later the number had grown to approximately one hundred, and within the last twenty years the growth of the dispensary or clinic has been little short of marvelous. In 1915, there were five hundred and thirty-eight baby clinics and, at the same time, over five hundred clinics for the diagnosis and treatment of tuberculosis. Within the last two years, there have probably been more clinics established for the diagnosis and treatment of venereal disease than have existed in all previous time in the history of this country.

Organized Social Service Work

A comparatively recent addition in this country to the activities of the public dispensary or clinic has been the inauguration of organized social service work. This has been a most logical development and it is hard to understand why it was not put into practice much earlier.

Dr. Richard Cabot, at the out-patient department of the Massachusetts General Hospital, established in 1906 the first well-organized social service department in connection with a hospital in this country. Since that time social service work has been extended into the inside departments of a large number of hospitals as well as into the out-patient clinics. It is not sufficient to furnish only medical or surgical service to those who are unable to pay the fees of physicians. It is quite as necessary to rehabilitate the patient in an economic way as it is to alleviate his physical disorder. It is unsound economic doctrine to relieve or cure a patient of his infirmity only to have him go back to the environment which produced it, and which may reproduce it, requiring a return to the hospital for further treatment. A patient may receive treatment for venereal disease in a hospital or dispensary, but the case presents a social aspect quite as important as the individual disease condition and conservation of human life and happiness will depend not so much on what is done for the patient, alone, but also on what is done in the way of protecting his family and the community at large.

A mother, with, perhaps, a large family, who is partially disabled through illness, cannot leave her family to secure medical treatment or surgical operation unless provision is made for the care of the children, but her return to complete usefulness is a matter of prime importance to the community. Through the social service departments of numerous hospitals in this country thousands of such people have been returned to their surroundings as useful members of society.

They have been recovered from conditions which formerly were hopeless and have been put upon a self-respecting basis. The social service worker in the hospital or out-patient clinic is an educator along the lines of better living and better health.

Under conditions existing today all over the country, the public has very little means of judging the professional qualifications of the physicians in any community. License to practice, all too frequently, means license as well to malpractice. How is the average person to know whether the man into whose hands he trusts his life is competent or not? There is no use attempting to conceal the fact that, often, the most incompetent are the most ambitious to do professional work for which they have had no training.

With all the advances of surgery in the last twenty-five years, there still remain numbers of half-baked surgeons who annually add to the toll of the grim reaper, literally, thousands of victims. Many of our hospitals, in effect, are the workshops of this class of practitioners, often not willingly so, but because there has appeared no remedy. Thus, the ideals of the hospital suffer, and very often, the institution is blamed for results over which it has had no control. It is true that the mortality in hospitals has very measurably decreased. Coincidentally, the hospital is becoming more and more recognized as the place to go when one is ill. But is the hospital doing its full duty in the way of protecting the public from incompetent medical practice? Certainly, progress is being made. Hospitals are realizing their responsibility, and many of them are taking steps to safeguard the interests of the patients who come to them for treatment. Those who have need of hospital care have a right to expect such service.

Standardization Next Problem

The subject of hospital standardization is the greatest single problem which confronts the hospital world at the present time. This movement, participated in by three great associations, namely, the American College of Surgeons, the American Hospital Association, and the American Medical Association, must certainly be productive of good. Hospital standardization, in effect, means nothing more than improved hospital and professional service. It means that the patient's interest must always be paramount to all other considerations. It means more careful diagnosis and more skillful treatment, both operative and non-operative. It will not be long before hospitals, in order to remain in good standing, must clean house of incompetents in all their departments and, particularly, in the professional staff.

Careful clinical records will be demanded. They will be preserved by the hospital for the advantage, not only of the individual patient treated, but for all of those who may come after, and to furnish material for scientific investigation into the cause of disease and the methods of cure. Laboratory facilities will have to be put into daily use. Men with qualifications other than political or social standing will constitute the permanent staffs of first-class hospitals. The staffs will be limited, and the hospital will admit only patients of staff members and will thus be enabled to stand sponsor to the public for a greatly improved type of professional service. If, for sufficient reasons, the hospital remains open for the general use of the physicians of a community, then it will be the duty of the hospital to prescribe the qualifications, supervise closely the medical work done in the institution, and guarantee to the public that physicians showing themselves to be incompetent shall be excluded from its privileges. The public has a right to such service on the part of the hospital and it behooves every hospital early to recognize its responsibility and to act accordingly. Of course, it is obvious that the hospital cannot control the practice of medicine in any given community, but it can exercise a most helpful influence over medical practice within its walls.

Hospital a Place of Training

As has been suggested in the foregoing, the hospital must be a place in which men are trained to render the first-class service which it seeks to assure. This means that recent medical graduates must grow up in the hospital, gradually taking places of greater responsibility, but always after proving their worthiness of the confidence placed in them.

Almost every hospital of any size maintains a training school for nurses. Some of the training has been most excellent, and some, on the other hand, has been little short of wretched. The hospital, as the result of conditions which it was often unable to rectify, has been forced to exploit pupil nurses and to require more in the way of service than it has given in the way of training, and the result has not been beneficial to the profession of nursing. With the present opportunities for nurses, the whole order must quickly change. The hospital that largely exploits will find itself without nursing service or with the lowest order possible under the laws regulating the registration of nurses.

Much has been said lately regarding the shortage of trained nurses—this despite the fact that there are probably more nurses in training

than ever before. The shortage, however, is only relative. Nursing service, instead of being a luxury, is looked upon, even by those of moderate means, as one of the modern necessities. The fact is that there are not enough nurses to go around. A new public responsibility is thus placed upon the hospital. More nurses must be trained and a different training must be given. Individual patients in the future can not expect the undivided services of a trained nurse unless the illness is such as to warrant them. Patients who are not sufficiently ill to require hospital treatment may secure necessary nursing service by the hour. One nurse may thus serve many patients. This she can do if her whole time is given up to furnishing purely professional nursing service. If nursing under home conditions is not adequate, then the patient will go to the hospital. This, in the end, will mean better care for those who are sick and lessened responsibility and worry for those who are well.

Value of Group Practice

Under modern conditions, the medical practitioner finds himself confronted with a field so limitless that he may never hope to compass the knowledge of detail and technique required to cover it in all its extent. The family physician of the past was often an unusual man who grasped the essential, known details of all the branches of the healing art. But in recent times no single intellect has been able to comprehend it all, and so we have seen develop to a large degree specialization in medicine.

Specialization has almost come to be a fetish. Now, instead of knowing all there is to be known about all of the various branches of medicine, the up-to-date specialist knows nothing but his own. If we are clearing the Scylla of generalization, we are dangerously grazing the Charybdis of specialism and so a tendency of today is for medical practitioners of the highest type to group themselves so that the patient may have the judgment of a number of specialists, with a knowledge of specialized practice, and still with the safeguard of the opinion of many minds.

Group practice is nothing more nor less than what has been developed in the professional service of the up-to-date hospital or dispensary. Heretofore, such service has been available only for the poor. The very rich might secure a semblance of this service, but, after all, only a semblance, because the patient who is wealthy would be sent from one specialist to another, whereas the poor would have the benefit of a group consultation of these same men. The moderately well-to-do—the average citizen—must get along

as best he can. He cannot afford high-priced specialists and he is above asking for charity, but his day is coming. Voluntarily, groups of medical men are already demonstrating the practicability of group diagnosis and group treatment in private practice. The greatest surgical clinic in the world is founded on this principle but the whole world cannot go to Rochester, Minn., and so Rochester, Minn., is slowly coming to the world.

Hospital Natural Center of Group

In various ways, community health services and community health centers have been built up. The community health centers, established within recent years in a number of American cities, have been highly successful. While their scope is largely limited to purely preventive measures, still they have already proved themselves efficient agencies in the dissemination of knowledge of the cause and prevention of disease. The practicability of the plan already demonstrated, why should not the hospital maintain, as a part of its service to the public, a group of expert medical men qualified to give the best service to the public? The hospital becomes the natural center for such a group and, alive to its responsibilities, gives the most logical assurance that the highest type of service will be rendered.

The man of moderate means need no longer then look forward to a period of illness for himself or his family with the dread which now besets him. For a moderate fee in the way of health insurance, the services of an expert group may become obtainable. He may avail himself of the privileges of the poor without becoming pauperized. He may enjoy the privileges of the rich without exceeding the limits of his income.

Members of the hospital group, on the other hand, carefully selected for their several abilities, may devote themselves unreservedly to the work for which they are best fitted. They will render a quality of professional service not otherwise possible. The hospital will become popularized as the results become known. The practice of group medicine properly implies the service of a number of experts, each skilled in his own particular line, in the diagnosis and treatment of disease.

As before indicated, group practice is a plan developed in order to overcome the chief objections to special practice. It recognizes the province of the specialist and realizes that specialization is necessary in order to master the multitudinous details in the various fields of medical practice. The group thus becomes a cooperative body. The diagnosis or the treatment, as the case may be, becomes a composite diagnosis or treatment and not a series of individual opinions of

a number of specialists. The specialists act in conjunction and not as mere individuals. In this way the patient is assured of a complete examination and is protected against any probable mistake. One member of the group acts as a check on every other member, and, if one man is inclined to overestimate his particular specialty, this tendency is neutralized by other members of the group.

In order to secure the smooth operation of such a plan, it becomes essential that the members of the group surrender the individualistic prerogatives so tenaciously adhered to by the specialist of recent years and devote themselves to a coordinated method of procedure, designed primarily to result in better treatment of the patient. Instead of standing out individually, the group member should content himself with the reputation for increased accuracy and dependability which the group will enjoy.

Aside from the carefully conducted examination and the better-founded opinions regarding his condition, the patient will receive the additional advantage of such service for a decidedly less cost. For a comparatively moderate fee—no more, perhaps, than that claimed by one or two members of such a group acting independently—a patient will be entitled to the services of the entire group. The saving then to the individual patient will be a consideration which, undoubtedly, in itself will immediately commend the plan to the public generally.

Hospital an Agency in Public Health

That there is still much to learn before group medicine can be put into wide practice, goes without saying. That it is essentially sound in principle is conceded by both the public and the medical profession. Whatever the details of the plan may be, it seems obvious that the hospital is the natural center for the practice of any system of medical team-work. No doubt special parts of the hospital of the future will be devoted to this feature and headquarters will be provided within the institution for the members of the group.

As an agency in public health endeavor, the hospital becomes increasingly important as a center in which numerous activities have their inception and from which they extend into the community. Until within very recent years, the hospital has not been considered as of any particular significance in connection with public health except in the very limited sense that it rendered stereotyped hospital service to the poor. Our conception of the part of the hospital in an enlarged program for public health has under-

gone as great an evolution as our appreciation of the scope of public health work generally.

It is not so long ago that the chief efforts of health organizations were largely directed to an effort to control communicable diseases by the almost medieval methods of attempted segregation of infected persons and of those who had been exposed. The miasmata arising from damp places were held responsible for the prevalence of malaria. Now we know that the only basis for such a tradition is the fact that the swampy districts served as breeding places for the anopheline mosquito which transmitted the disease. The refuse pile was credited with originating typhoid fever when, as a matter of fact, its only rôle was in the breeding of flies which became, literally, the "winged messengers of death." Fumigation of dwellings has given way to the more rational practice of careful bedside technic in the care of the patients and a closer surveillance of the persons who have come into contact with the infected patient.

Education of the public, child hygiene, including infant welfare, with a concerted effort to reduce the infant mortality to minimum limits, well-directed efforts to eradicate tuberculosis and venereal disease, and other like endeavors have rapidly been recognized as the truly essential fields to which the attention of the sanitarian must be directed if real results are to be accomplished.

Number of Sanatoriums Inadequate

In the development of the new program of public health, the hospital has come to occupy a most important place. The special hospital for tuberculosis is now a recognized need, at least of every community of any size. In the crusade against the white plague which claims so many victims, the sanatorium is regarded as an essential feature. The sanatorium will not eradicate tuberculosis any more than the fire station will eliminate fires. However, in the fight against tuberculosis, the sanatorium is just as essential as is the fire station in the control of fires. With the well-directed, continuous, and nation-wide campaign that has been waged against tuberculosis in late years, the number of sanatoriums for the treatment of the disease have increased tremendously, but still the number is woefully inadequate. Practically all of these institutions have waiting lists, and a large proportion of those afflicted with tuberculosis can not be cared for.

Perhaps the chief cause of suffering and indeed of death, direct and indirect, is venereal disease, and yet the general hospital is still not equipped to care for this great problem. The war has shown the need most forcibly of a clearer under-

standing of the importance of the venereal diseases. The problem has existed almost from time immemorial and yet in this country it is only within the last two or three years that any considerable effort and money have been expended in an attempt, on any great scale, to combat the menace which threatens, not only the health of the nation, but its very social structure.

The Hospital and Venereal Disease

The hospital must be relied upon to perform a most important duty in the control of the venereal diseases. Usually the general hospital provides little or no facilities for the care of patients afflicted. Venereal diseases require hospital treatment, and, except for those institutions devoted to special conditions, all hospitals should be expected to furnish their quota of facilities for the diagnosis and treatment of these so-called social diseases.

From the expressed opinions of those most competent to judge, it may be conservatively stated that at least 10 per cent of the population are sufferers from syphilis alone. It has been variously estimated that from 20 to 50 per cent of males reaching the age of forty years have been sufferers from gonorrheal infection. Syphilitic infection and its sequelae probably account for as many deaths as tuberculosis. Two years ago these figures were astounding to the general public. The facts have been known to the medical profession, but it has taken the war to awaken the people to the magnitude of the problem. Every general hospital, as stated, should make provision for the reception and care of persons afflicted with the venereal diseases, and special hospitals, under certain conditions, should be erected and maintained for the same purpose. Recent studies would seem to indicate that a large proportion of women infected with venereal diseases are mentally abnormal. This fact in itself suggests that, as part of the plan for the control of the diseases in question, it will be necessary largely to increase the facilities of psychopathic hospitals and further to establish on a large scale institutions for the segregation of infected women whose mental status precludes the possibility of their becoming anything but a menace to the public health. In such special institutions these diseased persons could receive treatment and supervision which would enable them to contribute something useful in the way of industrial effort to the world and at the same time be segregated in such a way that they could no longer spread disease.

Essentially, except in magnitude, the venereal diseases present no different problem, from the

standpoint of public health, than do other communicable diseases. The average community in this country is ill prepared to care for the common communicable diseases which develop within its borders. The modern communicable disease hospital is comparatively a new conception. The pesthouse of antiquity has not by any means passed out of existence. The lack of provision for proper care of persons infected with communicable disease is substantially a national disgrace.

Value of Contagious Disease Hospital

There is no difference of opinion among sanitarians that a properly constructed and equipped hospital, especially designed for its purpose, is the ideal place for the segregation of persons infected with communicable diseases. Cases of disease which otherwise would be a serious menace to the community as well as to the other members of the household in which they develop can easily be given better care and medical treatment than they could possibly receive under the usual home environment. Sanitary isolation is so difficult an accomplishment in the home, and quarantine measures applicable to the household are so hard to enforce, that it is to the interest of every community, as a matter of protection to the public health, to establish and maintain a modern contagious disease hospital. Aside from the protection it affords and the indirect saving thus accomplished, such hospitals effect an enormous economic saving. When account is taken of the tremendous loss in effort and in wages entailed by the usual quarantine procedure, it is usually not difficult to convince the proper authorities that hospitals for communicable diseases should be available. Wage-workers are compelled to suspend their work and to undergo financial hardship, and finally to become burdens on the community simply because adequate facilities are not provided for the hospitalization of patients with contagious disease. Communicable disease hospitals can safely be established in connection with general hospitals and it is often advantageous to pursue this plan for in sudden emergencies the general hospital usually has better facilities in the way of personnel and equipment to meet the unusual demand. The recent epidemic of influenza clearly emphasized the utter lack of proper provision to meet the sudden need caused by a widespread epidemic.

In numerous communities, dental clinics have been established in connection with hospitals or as independent units. Under ordinary circumstances it seems obvious that there are many advantages in having the clinics a part of the hos-

pital organization for the reason that the more activities of this character become associated with the hospital as a health center, the sooner people will regard the hospital as having functions outside that of merely caring for the sick. The results of the draft examination showing that fully one-third of the men of military age are physically unfit for military service, and of this number a large proportion were disqualified on account of defective teeth, there is no need to argue that preventive dentistry offers a most useful field for future effort. Disease conditions of the teeth are found to cause a great variety of disorders not heretofore attributed to this cause. Therefore, any well-equipped hospital attempting to realize its responsibility to the public must maintain a dental department especially for the diagnosis of disease conditions of the mouth and, in any efficient group organization, a competent dentist should occupy an important place.

Maternity Care Reduces Deaths

Another way in which the hospital may render community service is in providing proper maternity care for those who, under ordinary conditions, would not receive it. In the prevention of infant mortality, public health can demonstrate most striking results. The general infant mortality rate throughout the country is not less than 112 per thousand births. With adequate public health organization, including public health nursing, the average industrial community can reduce its infant mortality rate to at least 80 deaths per thousand births. When we realize that approximately one-third of all deaths under one year of age occur in the first week of life, it is not necessary to enter into lengthy arguments concerning the question of better care for the mother both before and after the birth of the child. Leaving aside the interest of the community in the mother, the child represents an asset to the state. Should any community endure the stigma of having it said that it can not afford to provide that its future citizens shall be well born? The hospital offers the solution. The community could well provide that all mothers, irrespective of their financial status, should have hospital care at childbirth and for a reasonable time thereafter, together with competent medical attention and nursing service.

Many of the births occurring among our citizens of foreign extraction are attended by ignorant midwives. The hospital is the most logical agency for the eradication of this evil. Usually the chief reason for the employment of the midwife is the expense of medical and nursing service. If it were made possible for the mother to

receive the care here suggested, at no greater expense than would be entailed at home, it would go a long way toward the elimination of the ignorant midwife. As far as the foreign population is concerned, the hospital is in a position to be a great force in the program of Americanization. The average foreigner has an inbred respect for the medical profession and for the hospital. Through the hospital he may receive new impulses in right living and instruction in numerous matters particularly concerned with the preservation of health that will make him, not only a better man, but a better citizen.

Effect of Industrial Hygiene

Another way in which the hospital will come more and more in touch with the community is through its relation to the subject of industrial hygiene, health insurance for workers and allied problems.

Industrial medicine is fast assuming a place of capital importance in the field of medical education and research. Investigations into conditions of labor which lead to ill health and unemployment are matters which might well enlist the interest of the hospital. It has been estimated that working people lose, on an average, nine days a year on account of sickness. This takes no account of loss of effort and efficiency on the part of those who continue at work despite the fact that they are suffering from illness for which they should receive either home or hospital care. Much of this illness could be prevented if the underlying causes were well understood. The hospital is often in a position to carry on investigation into these causes better than any other agency. Owing to the fact that individual industries have great difficulty in keeping track of their employees, chiefly on account of the labor turnover or the migration of labor from one industry to another, it is impossible to conduct from the factory or workshop far-reaching studies in connection with individual cases. The industrial worker, however, suffering from various ailments, will finally come to the hospital and from here exhaustive studies, which will be of immeasurable benefit both to industry and to the country as a whole, may be instituted. Information at hand regarding industrial diseases is comparatively meager. Our sum total of experience has not been great, and every available source of information should be utilized. The medical profession as a whole is woefully ignorant of the problems of industrial medicine, and to practitioners the hospital should serve as a postgraduate school in this broad subject.

There is a large demand for specially trained

nurses to enter the field of industrial nursing. In fact it is already a legal requirement in a few states that certain industries employ competent first aid attendants. The supply of qualified nurses is utterly inadequate and in the preparation of nurses for this specialized line, the hospital owes a distinct public obligation.

Medical social service workers should correlate the cause and effect of industrial disease through the hospital on the one hand and the factory on the other. The patient who receives treatment in the hospital should be kept under observation when he returns to his work with a view, not only of preventing a recurrence of the disorder, but of applying the information thus gained to the prevention of disease in other workers.

The work of the hospital in the physical reconstruction of the wounded and war disabled has pointed most clearly to the needs of similar work in what is really the much larger field of reconstruction of the disabled industrial worker. Occupational therapy and industrial reeducation are going to be part of the activities of the hospital of the future.

Reference has already been made to the hospital as an educational center. The hospital should be made the depository of records of all kinds of medical and surgical experience. Hospital patients should be taught the principles of disease prevention, and should be encouraged in proper care of their physical resources.

Medical Staff as Teachers

Not only should the medical staff be regarded as having to do with diagnosis and treatment of diseases, but its members also should be made to feel their obligation as teachers of right living to the public and instructors of younger professional men, of students and nurses in all of the branches of the broad field of preventive medicine. In a sense, a hospital system might be evolved much on the order of our public school system. If private instruction were the only means available, persons in moderate circumstances would not be able to provide the educational advantages for their children which we, in this country, feel should be the right of every individual. In exactly the same sense, the average person cannot afford the type of medical service to which all human beings should have access. This highly desirable service can be secured for the large majority of people in only one way and that is through public provision. Frankly, this is state medicine. State medicine should not and will not supplant private practice any more than the public school should supplant the private institution of learning. There is still

a large opportunity for private medical practice, but the day is not far distant when the public, realizing that it is within its own power to provide it, will establish state medicine in one form or another.

This sounds like socialistic doctrine. It is not socialism in any sense. It, perhaps, might be termed socialization, and it certainly is time, both for the good of the public and the med-

ical profession as well as the hospitals, that some degree of socialization should take place.

With the greater demand of the public for a better type of service than has hitherto been rendered will come a recognition on the part of the physicians and the hospitals that their own interests quite as much as the welfare of the people will be safeguarded and promoted by the changed order.

HOSPITAL AND HOME ISOLATION OF INFECTIOUS DISEASES:—THEIR RELATIVE VALUES

By D. L. RICHARDSON, M.D., SUPERINTENDENT, PROVIDENCE CITY HOSPITAL, PROVIDENCE, R. I.*

IN dealing with the subject of the relative values of hospital and home isolation of infectious diseases, it must be realized that a single answer cannot be made to apply to all infectious diseases. Those which possess similar characteristics as to periods of infectivity, modes of escape of virus from the body, and modes of transmission can be grouped. It would be of far more value, however, to discuss each disease and draw conclusions as to the results of methods of isolation. In addition to the characteristics of each disease—such as modes of transmission, the percentage of cases which can be recognized, whether patients develop the carrier state, and the knowledge we possess as to when a patient is free from infections—there are other practical problems which enter into the question. One of these is a financial one, namely, whether a community can afford to support an isolation hospital and furnish enough patients who live within convenient access, to keep the hospital open all the time.

Failures of Home Isolation

Another factor is the amount of intelligence of the people and their willingness to cooperate, particularly in maintaining home isolation. Among foreign-born colonies in our large cities, where the people speak little English and know little about infectious diseases, the placarding of a house is not of great value. In fact, it adver-

What is the value of hospital isolation?

Is hospital isolation of every patient ill with an infectious disease always ideal?

In what diseases is isolation practically useless?

Does it make any difference in family infection whether the patient stays at home or goes to the hospital?

How can it be determined who should be compelled to go to the hospital and who should not?

Is the modern hospital for infectious diseases a necessity to the average community?

tises illness in the home, and neighbors and friends flock in to find out what is the matter. Among the more intelligent native population who have some conscience, the card serves a very useful purpose, although they may object to it because of the ostracism which it imposes.

A third factor of much importance is the capability of the family physician for making early diagnosis, and his willingness to report

these cases at the earliest possible moment.

A fourth factor is the Health Department—whether its workers are well trained, conscientious, prompt, and provided with sufficient funds to do their work well.

A fifth factor is our ignorance of etiology and modes of transmission of many infectious diseases.

Theoretically, it would appear that the hospital isolation of every patient ill with an infectious disease would be ideal, and should lead to abatement or control of all such diseases. Practically, this is not the result. In the first place, it is impossible to isolate every case, because we have no means of recognizing all of them. It is easy enough to recognize a typical case of scarlet fever, but nobody knows how many sore throats

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with mild or marked symptoms, but not attended by any eruption, are truly scarlet fever. Mild cases of diphtheria also present this problem even though we do know its cause and are able to recognize a large number of sore throats as diphtheria. Both of these diseases also develop the carrier state, and in a large city it is impossible to locate all the convalescent and healthy carriers. In epidemics of most infectious diseases, the virus is widespread among the people of the community but relatively few of them contract the disease, either because of immunity or because of small quantity and avirulence of the virus.

Isolation May Fail to Check Spread

Hospital or home isolation of some diseases is of no avail to check their spread. The recent outbreak of influenza is a good example. It is of little or no use to isolate measles and poliomyelitis. Influenza and measles are infectious so early that the damage has been done even before the disease is suspected. In a poliomyelitis outbreak, there are so many carriers and mild cases, that isolation of known cases is useless.

Dr. Charles V. Chapin has kept a careful record from 1904 to 1912 of the attack rate of diphtheria in families when the primary case was kept at home. This rate is 23.25 per cent. The attack rate among families in which the primary case was sent to the hospital, during a period from 1895 to 1912, was 20.25 per cent. There seems to be very little difference in family infection, whether the patient stays at home or goes to the hospital. These figures, of course, do not shed any light upon the question as to the effect upon the community outside of the family.

Information on this latter point is available. In London, hospitals were opened for scarlet fever in 1870. By the year 1890, 42.8 per cent of the patients suffering from scarlet fever were treated in the fever hospitals and the percentage rose until in 1912, 90 per cent were so treated. Yet, while the attack rate in 1891 was 270 per 100,000, in 1910 it was 230. During the interim it was variable but higher than either of these rates, reaching 850 in 1893 and 570 in 1897. Diphtheria was first hospitalized in 1888. In 1890, hospital admissions were 17 per cent, in 1912, 86.4 per cent. Yet while the attack rate in 1891 was 150, in 1910 it was 120 and during the interim it was considerably higher.

In Edinburgh, 40 per cent of scarlet fever patients were admitted to the hospital in 1890. This rose to 94 per cent in 1910. In 1881, the attack rate was 604; in 1891, 380; in 1910, 470. Thirty per cent of diphtheria patients were hospitalized in 1890, 93 per cent in 1910. In 1881,

the attack rate was 80; in 1891, 79; and in 1910, 159.

In Huddersfield, England, in 1881, 57 per cent of scarlet fever patients were hospitalized, in 1910, 96 per cent. In 1881, the attack rate was 250, while in 1910 it was 870, the rate being variable between these dates.

Value of Hospital Isolation

It is not fair, however, to conclude that hospital isolation has not been of value. It has served as a useful agent in preventing large outbreaks and has thus been a factor in checking the prevalence of infectious diseases. If one examines the English statistics in their entirety, it is evident that there is a very slow variable diminution in these diseases. Most of the severe cases have been sent to the hospital, and there is little doubt that hospital isolation is of more value in the severe types than the mild, because the severe cases are much more infectious and more likely to give rise to severe secondary cases. The mortality of scarlet fever in London, it will be noted, has greatly decreased until even in the fever hospital it is less than two per cent, year after year. Hospitalization has been a prime factor in lowering this mortality.

Another side to hospitalization is the better care which the patient receives than is possible in the poor homes or even in many middle-class homes.

Hospital isolation is of greatest importance at the beginning of an epidemic of an infectious disease, particularly if the disease has recently been introduced into the community. It is like stopping a leak in the dike. But once the epidemic is in full swing, hospitalization is not possible for all cases and is of little avail because there are so many points of infection which cannot be located. The hospital serves a most important rôle in taking the sick from homes where they cannot receive proper care. The beginning of an epidemic is the time when strenuous efforts of health authorities in locating and hospitalizing every case has the most telling effect.

It is fair to conclude that hospitalization is of greatest value early in an outbreak; that while it may not bring about the disappearance of infectious disease in any community, it prevents the disease from becoming a severe epidemic; and that it helps to decrease mortality by furnishing better care to the patient, and by the removal of the severe types of disease from the community. It is also of great convenience for many people. In view of the fact that it is neither possible nor of absolute importance to provide hospital isolation for all infectious diseases, certain

well defined principles should be laid down as to who should be sent to the hospital and who should not. In the beginning of any epidemic of smallpox, typhus fever, measles, or any other disease which appears in the community, patients should be compelled to go to the hospital. Once the disease has become epidemic, the decision rests upon several factors. If the family includes several children, the primary case certainly should be removed at once. If the patient lives in a hotel, apartment, crowded tenement, or where any business is conducted, removal to the hospital is imperative. If either of the parents is engaged in handling food in any capacity or in any other occupation where he comes in contact with a large number of people daily, removal to the hospital is of great importance. If this is impossible, the parent should be excluded from the home while the patient is there. In a general way, all very sick patients among poor people should be hospitalized. Two common diseases which are

looked upon as necessary evils, yet whose mortality is higher than scarlet fever, are measles and whooping cough. Children suffering from these diseases, under five years of age (and particularly under three) should be hospitalized, unless it is evident that home care will be adequate.

Both hospital and home isolation are of great importance and the rôle of each depends upon varying circumstances. A modern, well equipped hospital for infectious diseases is a necessary institution for every community of any size and will justify its existence as an excellent investment from the standpoint of saving life, as well as limiting the spread of contagion. The control of any disease can best be accomplished by an isolation hospital which is conducted in close harmony with the health officer of the community. Each particular case is an individual problem and the health officer must decide whether the patient should be sent to the hospital or can be properly cared for at home.

THE NEED FOR WAR-TRAINED PHYSIOTHERAPY EXPERTS IN THE HOSPITAL

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ONE of the finest possibilities of progress in the surgery of peace which was made possible by our war experience, lies in the chance of developing a tradition and practice of real after-treatment of injuries, particularly along lines of physiotherapy and curative occupational "training." Unfortunately, however, there is no certainty that the physiotherapy aspect of this after-treatment will be developed as it should be.

During the war our returning soldiers were given a care in convalescence that was wiser and broader than we have been accustomed to and was carried out with an extraordinarily high average of efficiency. This was possible for several reasons: first, because the need for this sort of thing was frankly recognized and provided for. Second, because the patients were massed and under some control. Third, and most important of all, because there was a new sort of personnel to do the work.

No department of the army medical machine worked better than the department of physiotherapy. From the first draft of the plans by Colonel Brackett and myself, in the early summer of 1917, through the work of organization under the Surgeon General and the building up of a machine (largely by Maj. F. B. Granger under Col. Frank Billings), the picking and training of the per-

sonnel and the work itself progressed as originally planned.

Had to Build Up Personnel

It was evident at the start not only that the army had no adequate personnel for this work but that none was immediately available anywhere; it had to be built up. Medical men were available but not very many, and in most cases even these had practised only one branch of physiotherapy; whereas not only massage but also electric and hydrotherapeutic work, heat, light, and exercise treatment had to be provided. Furthermore, most of the men were not familiar with traumatic cases. They were brought together, instructed in methods, and taught balance, perspective, and standards. With this instruction, they did excellent work in directing the activities of the women aides.

But at the start there were no aides. Masseuses there were in plenty, rarely, however, trained in anything but routine massage, and often only half-trained. Physical culturists were numerous, with much theory, and with a good deal of practice in handling the problems of normal and abnormal development. But, as a rule, neither class knew anything about injury work or had had any practice in it.

It was a problem, but the problem was solved. This was possible because the war interest brought so many applicants. Of all the material offered, the highly trained women of real quality were picked out, registered, and put in service, partly to work, and partly to supervise and train the rest. Then began the special training of other picked women. At various points certain schools offered intensive courses from six to twelve weeks, prepared schedules which were approved, and went to work. There were such schools as the Reed School at Portland, Ore., and the Boston School at Boston, Mass., both of which furnished a considerable quota. Others, also, did good work. As a result, there was a supply of women, not all very experienced at the start, but soundly and properly trained for the work they had to do. So far as possible, they were given further clinical training under Maj. Robert W. Lovett, in a sort of graduate course established by the Government. Due to the pressure of time, the women who received this training were in the minority. The rest completed their training "on the job," under continuous supervision and teaching by specially qualified medical men and head-aides. They did splendid work here and abroad, and are still doing it in the army hospitals not yet closed.

It is significant that of about 2,000 applicants only about 815 were chosen. This gives one a conception of the pains used in the selection of personnel. It does not, however, tell the story of quality. Ninety per cent of these women were graduates of colleges or of normal schools in physical therapy. That comes closer to the story. The fact is, that at the close of the war the Government had in its service a group of young women of highly specialized training with a large experience not only along lines of massage treatment, but also in general physiotherapy treatment of injured men. They were not routine workers, but had knowledge, imagination, and insight enough to know what they were trying to do. Moreover they knew enough to judge results.

Trained Workers Should Be Utilized

We have never had this sort of personnel before in this country. What are we going to do with them now that the war is over? Many of these trained women are apt to go back to their previous work, varied, often entirely non-medical. This would be a distinct loss, for we have come to know how poor our care of the injured in industry has been.

We are talking a lot about industrial surgery. Can we do industrial surgery without provision for physiotherapy? Col. Frank Billings has said

that every hospital needs a physiotherapy department just as much as an operating room. Certainly no hospital which treats industrial or other injuries can produce first-class results within a reasonable time, without provision for such work; and within a very short time no such hospital will be able to face its community and confess that it has not made such provision.

It seems to me, therefore, that now is the time to start this movement to utilize the trained and expert medical specialists and experienced aides available as the result of the war.

HOLD CONFERENCE TO UNITE FORCES IN HEALTH CONSERVATION

A conference for considering a plan of health conservation is being held in Washington, D. C., on January 26, by health officers, sanitarians, and representatives of important national health organizations. In a letter sent recently by Surgeon General Blue to state and city health officers, to the head of the American Red Cross, the American Public Health Association, the American Medical Association, the National Tuberculosis Association, the International Health Commission, the National Safety Council, the American Child Hygiene Association, and other health agencies, the suggestion was made to hold a conference in Washington to consider a health program prepared by the Public Health Service. It is felt that unless these agencies get together and arrange some definite plan of health conservation, there will be overlapping of effort and waste of funds, since all of them are undertaking some health program. The favorable response to the letter by practically all the organizations showed their interest in such a conference.

OHIO HOSPITALS TO GIVE ANNUAL REPORT

The Ohio State Department of Health has issued an annual report form to every hospital in the state on which to report its work during the year 1919. The form was adopted with the active cooperation of a committee of three hospital representatives of Ohio, the committee composed of Dr. A. R. Warner, Executive Secretary, The American Hospital Association, Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, and Dr. M. H. Cherrington, part owner of Cherrington Hospital, Logan, O. The report was accepted by the Department of Health's Hospital Bureau, and by the Ohio Hospital Association. A bill creating the Hospital Bureau Department of Health was passed at the last session of the Ohio legislature, and the bureau was empowered to investigate, study, and to require registration and reports from all Ohio hospitals. The Ohio Hospital Association will assist the bureau in the collection of the required data. The report was sent to the hospitals late in December, 1919, to be returned in March, 1920. The form covers only the work of the institution and its cost, with a few basic figures. Hospitals are asked to supplement their systems of records to permit reporting along these general lines during succeeding years.

Two things indicate a weak mind: to be silent when it is proper to speak, and to speak when it is proper to be silent.—Proverb.

MAKING TOYS FOR CHILDREN OUT OF NEWSPAPERS AND PAPER BAGS

By MRS. MARY BARKER, SUPERVISOR OF KINDERGARTENS, WORCESTER, MASS.*

It was not so very long ago that the primary teacher looked upon the daily newspaper either as a medium of news or as an aid to a quick fire in the kitchen stove. Now she invites each child to bring a newspaper to school. The variety of articles that can be made out of newspapers is practically unlimited. The teacher may give the children a lesson in making newspaper pillows. They fold several thicknesses of paper together and then sew over and over the edges with big needles and coarse thread. Here the teacher may combine technic and skill with hygiene, by suggesting that the children use the pillows at the first picnic in spring. By sitting on the pillows, they may be prevented from catching cold from the damp ground.

Art for the Youngsters

Newspapers lend themselves readily to costume making. The *New York Times* and a few pins may be quickly converted into a costume for a Hallowe'en witch. Or at Thanksgiving time, a Pilgrim brother or sister may be dressed in broadbrimmed hat and wide collar or kerchief that is very effective. Excellent training can be given in cutting and folding when the goal is a soldier's cap. How dependent accomplishment is upon the goal! Once the human mind establishes a goal, then the child or man throws himself into purposeful activity. Attending upon this purposeful activity, or you may call it effort, are such goal-accomplishing elements as interest, attention, and concentration. Nothing can be accomplished that has in it an atom of originality or creativity without the attending elements of interest, attention, and concentration. It is only a slavish or dull nature that will work with these elements smothered.

In these days when the high cost of living enters into practically everything, it is refreshing to discover a means of entertainment and instruction for the child, that costs nothing. The toy that delights the child is not always the most expensive or most elaborate. How to construct fascinating toys and dolls out of newspapers and paper bags, and pins and string is told in this article and in the illustrations. Here are suggestions which will be of interest to anyone who deals with children, sick or well; and of particular interest to the nurse, who often finds it a difficult problem to entertain the sick or convalescent child.

The district nurse has cast her eye upon the daily press of our country and found it good—good for many purposes of which the brilliant editors have never dreamed. Only a person who has visited a home where a sick mother and four cold and hungry little children shiver under a single quilt, can even imagine the uses to which a district nurse can put a newspaper. She may add warmth by placing several thicknesses of news-

paper between the spring and mattress and add more warmth by covering a patient with one or two layers, but always between the bed sheet and outside covering. Newspapers folded many times make a temporary pad wherever there are discharges, and no absorbent cotton or cloth is available. If folded into a cornucopia and pinned firmly, they make an excellent catch-all for the sputum papers of a tuberculosis patient, or one afflicted with an active nose cold. Pleated and pinned, the newspaper makes a good light-weight fan. (Fig. 1.) If the patient is a child be sure to tie a bit of twine to the fan, then fasten it to the bedside. Little hands and sick hands lack grip, and picking up anything is impossible.

The district nurse knows how to save washing and the discomfort of dampness by putting a newspaper under a patient when bathing is to be done, or a footbath given. Last, but not least, a few clean papers quickly spread upon shelves or kitchen table give an effect of cleanliness for the eyes of a sick mother to look upon. The district nurse may be just wild to roll up her sleeves and scrub the shelves or table, but time and physical strength often make it prohibitive. Blest be the newspaper—"God knows it is all we had to wrap Bridget Murphy's baby in, the day he was born, and him now the alderman he is."

There is more fun in the newspaper than the nonsense column offers. Bakers' caps, soldiers' caps, trench caps, and sunbonnets are easily made by children, with a bit of direction from teacher,

*This is the second of a series of articles on the recreation and entertainment of children in the hospital and home. The first article appeared in the January issue.

mother, or nurse. Their charm lies in the fact that they can be worn. Have you ever noticed that a costume, or any part of "dressing-up-fixing" made by the child himself, will be worn unblushingly? But you rig him up in something you have made, and he will be as selfconscious as a pug dog with a blue bow. Any little girl patient whose bed has been rolled out upon the veranda from the ward will love to wear a sun hat or sunbonnet (Fig. 1). These head coverings are light in weight and protect the sensitive eyes of the sick child.

How to Make Sun Hat and Dolls

To make the sun hat, cut two circles with the diameter the length of the shortest side of a single newspaper page. From one, cut out of the center a piece of paper that will leave a hole the proper head size. This is the brim of the hat. Now pleat up the other circle, tam o'shanter style, and pin to the brim. Trim with scraps and cuttings in any mode fashion or fancy may dictate.

Captain January, the big paper doll shown in the illustration (Fig. 2) can be quickly torn or cut from newspaper by the nurse, and has amused many a sick child. His jacket, pants, hat, rubber boots, and mittens, can be designed and cut out with very little trouble. Captain



Fig. 1. A good light-weight fan can be made out of newspaper. It should be fastened to the bed with a piece of twine. This little convalescent patient also has a paper sunbonnet.

January, with his broad-brimmed hat and rubber boots, defies the weather particularly when he is pinned upon a blanket thrown over the foot of the bed, or upon the wall.

The News family are interesting dolls—Father News, Mother News, and Baby News (Fig. 2). These dolls are splendid for children in the isolation hospital or children suffering from contagious diseases in the home, as they can be burned up and fresh ones made the next day. Newspaper picture books are also entertaining.



Fig. 2. Captain January, wearing a smile and a complete paper outfit. Below him stands the News family, mother, father, and child, all wearing pleasant faces, for the sick child doesn't like ugly or cross ones.



Fig. 3. Shopping bags made by the children in a ward to give to their mothers when they came to see them. Some of the children even devised money to put into the bags. Paper pennies, nickels, dimes and quarters add much to the fun of the thing.

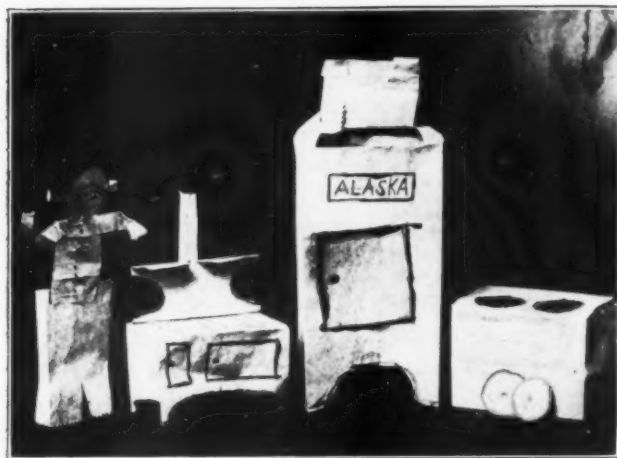


Fig. 4. A little paper man, a stove, refrigerator, and fireless cooker, made by student nurses in one hospital.

They are made by cutting and pinning together as many pieces of paper as pages are desired. Let the children cut out pictures and mount them with library paste. This is very entertaining work, and particularly desirable for the "peeler" who is shedding his skin and cannot go to school, or even play outdoors with his friends. In making dolls, never allow ugly faces to be drawn or painted. The sick child is peculiarly sensitive to the ugly or grotesque. Fear arises and cannot be controlled, as it may, indeed, even when the child is in a normal state of health. This is especially true of foreign children in public hospital wards. A new environment, strange people, separation from home, pain, and discomfort are all agents of fear.

Paper Bags Have Many Possibilities

A brown paper bag has endless possibilities. From a big bag a mask can be made that will slip over the head like a helmet. Cut a slash at the right and left sides, leaving an opening, like in the knitted helmets we have made and sent to France. The shopping bags illustrated (Fig. 3) were made by a group of ward children as a surprise for their mothers who were coming to see them during visitors' hour. Each child cut out from paper, money for his mother's bag. "Much moneys," said little Charles, who lay on a frame shaped like a tiny crescent bridge in a Japanese garden. Only a few of the children asked for pencils to make figures on the discs, like one, twenty-five, ten, and five, as in the picture. The circular form alone seemed to indicate money to them. In reproduction children are always direct. They seize upon the salient characteristic of the object. In this case contour was the essential thing.

The talking machine (Fig. 5) and the paper-bag man, stove, refrigerator, and fireless cooker

(Fig. 4) were made in class by Junior nurses. They are only a few of the clever toys made from paper bags by student nurses. Beds, chairs, houses, stores, a garage, and a rocking horse that will rock were made. A half-bushel bag was converted into a fascinating bird cage, where a gorgeous blue and yellow parrot, cut from a magazine had been installed. The original models brought into class by the nurses last year ranged from a circus wagon with a tiger behind the paper bars to dainty open-work boxes for handkerchiefs and gloves. Each year I am more impressed with the creative ability and resources of young nurses; each year I think no class will ever again bring me such delightful models. I recall a treasure a young student nurse offered, several years ago: a charming bungalow set in a garden, with tiny barn and henhouse, walks, and driveway. It was all surrounded by a garden fence. She had made the roofs red and had added other touches with water colors. It was like an architect's model. I am sure the house matron knocked on that girl's door before she had finished, saying: "Miss H., you know the lights should be out at ten o'clock." Of course one can do far more attractive work with new bags, such as the nurses use for experimentation, than with old bags. The size of the bag has much to do with the effectiveness of the article constructed.



Fig. 5. This talking machine was made out of a paper bag by one of the Junior nurses.

Somehow these absurd toys strongly appeal to children. A first grade teacher in the Worcester Public Schools, who gave a lesson on the method of making a newspaper doll, claims that the reactions have been most interesting. Dolls made of newspaper, handbills, tissue and wrapping paper, and wall paper have poured into her school room. Some were dressed in paper, some in cloth, some in lace. All were presented to her as creations of a rare order. That wise first grade teacher did not value those dolls for any beauty, for there was none. The intrinsic value was in the effort and imagination that had been put into the making of the doll by a six-year-old child. Too long have we placed the value in school work on re-

sults—on the product. The value of any project the child may undertake, such as writing and English composition, making a bird house, or doing an example in long division, lies in process. From process we gain skill, or ideas, or both. These we carry on to the next undertaking in life. Almost any one will agree that this work with odds and ends is diverting for the sick child. The most curious point is that teachers are finding that it is deeply educational.

We are often amused to see how seriously the children work. It is as if they said to the grown-up: "Why have you kept the real purpose of newspapers and bags from us? They are to be played with."

ANESTHETICS—THEIR USE, VALUE, AND METHODS OF ADMINISTRATION

By HARRY A. BRITTON, M.D., SUPERINTENDENT OF HOSPITALS, MINNEAPOLIS, MINN.

Administrative Requirements of the General Anesthetic

THE administrative requirements of the general anesthetic can be summed up in three statements. These requirements are:

1. A thorough knowledge of the action of the anesthetic employed.
2. A thorough understanding of the method of administration employed.
3. The pathological condition of the patient, especially of the heart, lungs, and kidneys.

Statements 1 and 3 can be considered under the indications and contra-indications and the physiological action of the various anesthetics. I shall consider ether, chloroform, nitrous oxide and ethyl chloride.

Ether.—Indications and Contra-indications for Its Use.—According to Hewitt, ether can be given to healthy and moderately healthy individuals with very little risk. It should not be given to patients who have a dislike for it due to the remembrance of some previous operation, or for some supposed inability to take it. The psychic effect may be sufficient to kill, there being cases of this kind on record. It should not be given where there is any disturbance of the respiratory system with or without marked dyspnea, kidney disease, disease of the aorta as aneurysm or atheroma and any other condition with high blood-pressure. Some authorities consider it contra-indicated in the extremes of life and in operations upon the brain or for exophthalmic goiter. In cases of chronic bronchitis, ether may be given if administered slowly and the operation is not too long. A com-

bined method is indicated in these cases. It should not be used with the actual cautery as the patient may be seriously burned.

The Physiological Action of Ether.—The principal action is upon the central nervous system affecting first the cerebrum, then the spinal cord and, finally, the medulla. The circulatory system is secondarily affected. The rise in blood-pressure is due to two causes, first, the excitement produced by the taking of the anesthetic and, second, by the stimulating action of the anesthetic itself. Under deep narcosis blood-pressure falls.

Absorption and Elimination.—Ether is absorbed by all the mucous membranes and eliminated principally by the lungs and some by the kidneys where it has a marked irritating action. It is a rather common occurrence to find albumin and casts in the urine following anesthesia. It may be the cause of producing glucose, acetone and diacetic acid in the urine which substances are probably produced by a disturbed metabolism.

Chloroform.—The physiological action on the nervous system is the same as ether but more powerful. On the circulatory system, there is a marked fall of blood pressure with slowing of the pulse. If given diluted there is a transient rise of blood-pressure but later, a fall.

Chloroform is also absorbed by the mucous membranes. It is eliminated largely through the expired air and somewhat through the kidneys. It is more irritating than ether, volume for volume, but as it requires only a small amount for most

operations it is much less irritating at the points of absorption and elimination.

Indications and Contra-indications for Its Use.

—Chloroform should be used in acute inflammations of the respiratory tract, in advanced nephritis, when complete muscular relaxation is required, to check convulsions or when the actual cautery is used. It should not be used when the patient is in the sitting posture, in diabetics, where the blood pressure is low, in prolonged operations, in cases of status lymphaticus or where there is an open flame.

Nitrous Oxide.—Nitrous oxide is the safest of all anesthetics, but requires a trained anesthetist to administer it, if given for any prolonged operation. Its action seems to be principally on the cerebrum and the rise in blood pressure is probably due to a certain degree of asphyxia. It is a good anesthetic to use for short operations, unless combined with oxygen, in which case it can be used over long periods. Relaxation of the muscles can be obtained by adding a small amount of ether. The chief contra-indication is arteriosclerosis.

Ethyl Chloride.—Little can be said about this anesthetic, except that it is probably more dangerous to use than any of the others. It lowers blood pressure and slows the pulse.

Who Should Give Anesthetics?

The Prerequisite Qualifications.—The ideal way would be to have a specialist give all anesthetics, but as this is almost impossible, any man or woman that has had special training in giving anesthetics can fulfill all requirements. The use of nurses for this purpose has been upheld by several courts. It has been stated that trained anesthetists insure to the patient complete absence of sensibility with the least amount of discomfort and risk. What are the requirements for a good anesthetist?

To become an anesthetist, one should take a thorough course of instruction, this to include, anatomy, physiology, some neurology, pathology, chemistry and physics. After having a good foundation in the above subjects, instruction in giving anesthetics should be started under the supervision of a specialist (medical man). Such a course would make the trained anesthetist but not the specialist.

The specialist, I believe, should be able to make his own physical examinations and treat any complications that may arise during the operation or immediately after. This relieves the surgeon of a great deal of the responsibility and allows him to give all his attention to the operation.

All anesthetists should know the physiological

action of the various anesthetics, including the avenues of absorption and elimination. They should know the indications and contra-indications of the various anesthetics. They should thoroughly understand the various methods of administration, open, closed, and rectal, also the preparatory and after treatment and methods of resuscitation.

The Staff Member as the Anesthetist.—Just as we have specialists in the various branches of medicine so I believe every hospital staff should include a member that is an authority on anesthesia. I do not believe it necessary that he should give all the anesthetics as this would be a physical impossibility, unless only one operation were performed at one time. The qualifications and duties of the specialist are: (1) He should be a medical man. (2) He should be able to test anesthetics as to their purity. (3) He should instruct interns, nurses or others to give anesthetics properly. (4) He should thoroughly understand the various methods of giving anesthetics, i. e., the advisability of using the open or closed method, also the various sequences. (5) It should be left to his judgment to select the proper anesthetic for each case. (6) He should have interns assigned to his service and train them to give anesthetics. (7) He should be called upon to give, or supervise the giving, of all anesthetics in special cases of surgical staff.

The Intern as the Anesthetist.—During the course of training of the medical student, each member of the class is supposed to give a certain number of anesthetics. Some do it willingly, some do it because they are forced to it, while some (the minority) manage to escape this very important training. This last class usually will avoid going to the operating room, unless they are sure of assisting at the operation.

The intern, when he enters the hospital, should know the fundamental principles of anesthesia and in the hospital should learn the finer points of administration under an experienced anesthetist. The intern is often more interested in the operation than in the patient to whom he is giving the anesthetic, with the result that the patient is either too deeply under the influence of the anesthetic or is coming out of it when the operator would like to have perfect anesthesia. This apparent indifference I have only seen in the giving of ether, and here it is probably due to the relative safety of the anesthetic.

If a staff man were at the head of a department of anesthesia, I would consider it the duty of the intern assigned to him to make his own examinations of heart and lungs, examine a specimen of urine and take the blood-pressure of each patient.

This information should be recorded on a special sheet and sent to the operating room with the patient. This sheet should also have a record of any important neurological lesion that would be likely to affect the reflexes and any preliminary medication that would be likely to mislead the anesthetist.

The Trained Nurse as the Anesthetist.—Of late years trained nurses are being allowed to give anesthetics and in several states court opinions uphold their right to administer same. I have found them more attentive to the patient than some interns and then again I have seen them almost drown the patient with the anesthetics, the anesthetic (ether) dripping off the mask onto the table. Occasionally you find one more interested in the operator or his assistants than in the patient. Any trained nurse should first be given a complete course in anesthesia and then should give a certain number under the direction of a staff man or other trained anesthetist before being allowed to give any alone. I do not approve of a nurse or other trained lay person at the head

of an anesthetic department if he or she is to be used to train interns, as I have always found interns resent being told how to give an anesthetic by a non-medical person.

Trained Women Who Are Not Nurses as Anesthetists.—I cannot see any reason why a thoroughly trained woman cannot give anesthetics. It would be absolutely necessary for her to have a thorough course as nurses have, in anatomy and physiology of the respiratory and circulatory system and also she should know something about the nervous system especially the reflexes.

Why limit the giving of anesthetics to women? In several institutions I have seen orderlies give anesthetics and they were given well. They watched the color of the patient and his respirations and depended upon the nurse to take the pulse.

Why not take such a man and teach him? As a result of the war we have a great many men that are not fit to do any very hard work and I believe many could be taught to give anesthetics properly.

HOW TO MEET THE NEED OF RURAL HOSPITALS

By J. J. ROSS, M.D., MIDDLEBURY, VT.*

DURING the last ten years, due to the recent criticism of medical colleges, followed by drastic recommendations, the number of men graduating from these institutions has been cut almost in half. At first this reduction had little effect on the rural communities, but it was only for a short time. Very soon they were the ones to suffer most. The war has only tended to make these conditions worse, for in many cases it was the rural community that gave most freely of its doctors. And now with the close of war, in many instances these men have gone to other fields. So as we are again approaching the normal there is still a great shortage which will be even more keenly felt as the older practitioners retire from service. These men have grown up with the towns until they are a part of the community, and they will spend their last years of usefulness for the "home folks." But we must soon face the fact that a man who has had to take a two-year course in college, a four-year course in medicine, and a year or two in a hospital as an intern, will be slow to locate in a community of 800 to 1,000 people. For many times he could receive more as intern than he could earn the first years of practice in a small town.

The deans of our medical schools are constantly getting letters asking for men to locate in the small communities. One who is familiar with the subject knows full well that a country doctor has to spend far more money for transportation and equipment than his city brother. His fees are smaller and he feels the isolation. All these factors are tending to turn away the physician from the rural districts, and in some instances the situation is really acute. One has only to look a short way into the future to see the time when real estate will depreciate in value because people will not want to live where they cannot have proper medical attention, at least in cases of acute illness, and in times of accident.

Rural Districts Need Doctors

I quote from a recent editorial in a Vermont paper: "The town of Corinth would seem to be a fine place for a young physician to set himself up in practice, inasmuch as there is no physician in that town and none located nearer than Chelsea and Bradford, both of which communities are removed many miles. The need of a resident physician for Corinth is made more apparent when one is told that a newly born child's life was sacrificed because of the inability to get a physician to attend the case, although ten different calls were

*Read before the Second National Country Life Conference, Chicago, Ill., Nov. 8, 1919.

made for medical attendance. Aside from the desperate need of a physician in Corinth, there is some incentive for a medical man to locate there because Corinth is an attractive little village and the center of several smaller villages into which a doctor's practice might be extended. The location does not promise quick wealth for a doctor but it does offer splendid opportunities for service and for reasonable returns financially, it would seem. . . . "This is one of the scores of similar instances reported from all directions. It now behooves all people to encourage young men to engage in the study of medicine. We are to bear in mind not only that there is an excellent field for physicians but also that this field offers a grand opportunity for service for humanity." Let us ask ourselves if the average young man just starting a home would like to ask his bride to go to Corinth to live.

During the war, many medical problems in France had to be worked out. The French people made their way to the base field hospital, advance dressing stations, or casual clearing station of the British army, and patients who before the war would have felt they must have a personal visit by the physician were only too glad to have a hospital to which they could go. The scarcity of medical men was so great in the British army that I have had patients come for miles for treatment.

Build Simpler Structures

One thing the war has taught us is that the hospital need not of necessity be constructed of brown stone or marble. I wish I could make the people of this country realize the great work done by our surgeons in some cases in operating rooms constructed out of packing boxes and under canvas.

Cannot we give up the idea of spending so much for architecture and make the money go farther by building a more simple structure? In a certain prosperous community the town rejoiced to know that a gift of \$30,000 had been made for a hospital. Soon after, however, all building was stopped on account of the war. On the signing of the armistice it was found that building materials had so soared in price that it was impossible to build with this amount of money. One of the trustees told me the other day that in order to make the money go farther, they had decided to employ architects that would seek to make a practical building rather than one noted for its architecture.

In many communities all that is necessary is that public sentiment be aroused. If this same town had had some one to make known the need

of a hospital, it might to-day have a prosperous one. The leading banker said to me only a few days ago, "Had I only thought to mention it to a wealthy man when he was making his will, he would have been only too glad to build a hospital." There are many people of wealth who are only waiting to have some one suggest to them such a need and they will respond to it. I recall one gift with which a hospital of fifty beds was built. However, it was a beginning, and to-day there is a hospital of 150 beds together with a good endowment.

Those who desire to study the problem of the rural hospital will find a most interesting institution at White Rock, North Carolina. A woman went into the mountains of this section to give an education to those who desired it. She soon saw the possibilities of a hospital. For years she worked on, looking continually for the right man to carry on the medical work and to be the nucleus around which the structure should be reared. Finally Dr. John Campbell of the Russell Sage Foundation persuaded his friend, Dr. George Packard, to take up the difficult task. He proved to be the man of the hour. The first achievement of Doctor Packard and his associates is one that can well be emulated. They did not wait until sufficient funds were available. They got their plans well worked out and when the first money was given the foundation was laid. Later the frame was put up and as money came in the building was completed bit by bit and furnished in the same way. To-day, as a result of years of planning and working, there stands among these hills one of the most complete hospitals in the land. The country people are proud of it for they feel it is their own, and they show their confidence in it by preferring it to some well known city institutions.

Anyone familiar with city life knows how easy of access are the numerous hospitals located in large cities. Not an accident occurs but what the victims, no matter how poor, are placed where they receive the best of care, within a few minutes. How different in our rural communities! Unable to get to a hospital, patients have to remain at home. Anyone who has done country practice knows what that means. Accident cases and cases of severe illness often turn out fatally when the outcome could have been different if proper treatment and nursing had been at hand.

Is there not some way these appealing facts may be brought to the attention of men able to meet the need? It seems to me there has been no time in the world's history when people were more ready to give. America has received a great lesson in giving and she can continue for a long

time with no ill effect. Surely there can be no more practical gifts than hospitals to minister to the needs of rural people. As I have already shown, these hospitals need not be costly in structure but may be unpretentious and at the same time adequately equipped.

Rural Hospital as Memorial

I have seen almost daily suggestions for appropriate memorials to our dead soldiers, but never have I seen the mention of a rural hospital. What more appropriate memorial could a county give than to erect a building where life might be saved and men and women made new! Could we not in this way make some of the lives recently sacrificed a living factor for good? I have had to break the news of the loss of sons in battle to parents. In one case it was the only son and child. What more lasting monument could those parents erect in memory of their son than a rural hospital within whose walls the lives of multitudes might be saved?

Another means of meeting these great needs, especially if a hospital is available, is the hearty cooperation of the state authorities, as seen in the work of the North Carolina State Board of Health. This state is trying to give to each child a chance to make good by remedying some of the physical defects which so often handicap our youth. I had the opportunity last summer to see the working out of the plans of this state board in one of its public clinics.

Owing to lack of medical inspection, many children of our rural schools and districts are suffering more to-day than those of our cities, and North Carolina is one of the states setting about to remedy this condition. It is arranging clinics where children may be operated upon for such troubles as diseased tonsils and adenoids at a minimum expense. In the case of this particular clinic which I attended, the children lived so far away that it seemed as though the doctors and nurses would have to give up the clinic. Perseverance won out, however, and soon the workers were asking, "Can we accommodate all that want to come?" The first day of the clinic the new hospital had twenty-two operative cases and the second there were fourteen. All this was accomplished in a hospital located in a mere settlement eighteen miles from a town boasting of one short main street. But this little settlement, which is the central point of this mountainous section, is really the key to the medical situation. Rural in the extreme in its surroundings, the hospital placed there will minister to the people living back in the mountains as it could not do if it were way down in the village on the railroad.

One physician can do as much in two hours in a hospital as he could in driving ten hours. We must sooner or later conserve the time and strength of our country physicians. Good roads have helped, but the bulk of a doctor's work is during the time of year when roads are at the worst.

In conclusion I would make these suggestions: First, that the vast amount of material collected by the War Department on the construction and equipment of hospitals be put to practical use. Reports will be made on adapting old structures to the use of hospitals. If all this material could be put into available shape and placed in the hands of those responsible for building rural hospitals, it would be a great help. Second, that a set of plans be drawn of a hospital that could be constructed at a minimum cost and at the same time, furnish the maximum of efficiency. Is not this quite as important as to furnish government plans for cow barns and pig pens? Third, that each state be asked to pass public hospital laws such as exist in the states of New York and Ohio. If a philanthropist knew such laws existed in his state he might more readily agree to leaving a gift for a community hospital, as he would know his funds would be wisely spent. Fourth, that an effort be made to educate our communities so that the county would be willing to levy a tax for the erection and maintenance of a hospital. The *per capita* tax would be small but the result would be great.

I have tried to show briefly the great needs of rural hospitals and to give some suggestions for meeting the need. Surely we cannot expect the people of our rural communities to be much longer content with their lot if they are not ministered unto as well spiritually, intellectually, and physically as their brothers of the larger communities.

Victor C. Jacobson to Wisconsin

Dr. Victor C. Jacobson, pathologist to the Peter Bent Brigham Hospital, Boston, has been appointed assistant professor of pathology in the University of Wisconsin.

CHILD WELFARE IN FRANCE

The general child welfare activities of the American Red Cross during the war included an appropriation of \$3,013,505 for the children of France. An idea of the extent of the work is given by the following table:

Hospitals and convalescent homes operated.....	\$ 25
Patients treated in above.....	16,348
Dispensaries and clinics operated.....	99
Patients treated in above.....	189,111
School children served in canteens.....	32,000
Children taught to play.....	27,000
Child welfare expositions held.....	7
Attendance at expositions.....	625,000
Children's institutions or societies aided.....	519

AIR CONTROL AND THE REDUCTION OF THE DEATH RATE AFTER OPERATIONS

ELLSWORTH HUNTINGTON, PH.D., RESEARCH ASSOCIATE IN GEOGRAPHY, YALE UNIVERSITY, NEW HAVEN, CONN.*

Part II. Variability

THE preceding part of this article* contains repeated reference to variability as one of the most important elements in the control of the air. We are now ready to discuss the matter in detail. In a recent article¹ figures were given showing the relation of about 400,000 deaths in New York City during a period of eight years to the weather on the day of death. The figures showed conclusively that

when all sorts of ailments are averaged together the general death rate at all seasons varies in close harmony with changes in temperature. In summer and winter alike a drop in temperature is at once followed by a drop in the death rate, while a rise is followed by a rise in the death rate. In the same way, investigation discloses that if the temperature from one day to the next remains constant, the death rate on an average also remains constant.

That this should be the case in summer is quite to be expected, for everyone knows that hot weather is depressing and that a cool wave is stimulating. But why should it be true in winter? Cold weather is certainly harmful in the long run, as is proved not only by common experience, but by a detailed study of millions of deaths. Moreover, sick people who are on the point of death are guarded from the outside air more carefully than any other group. How then can they be at once benefitted by even a slight drop in the outdoor temperature? Elsewhere I have suggested that the case is analogous to a cold bath. The shock of the cold air, like the shock of cold water, is presumably stimulating and has a good effect on health provided it does not last long enough to cause a chill. That explanation may apply to persons who are in good health and who

The idea that uniformity of temperature and of weather is beneficial appears to be wrong. Constant, but not excessive variability appears to be beneficial in almost all diseases, as well as for persons in good health.

In surgical operations this is particularly important. Except in the most extreme weather operations performed when there is much variation from day to day have a far greater chance of success than have those performed when the weather remains the same day after day.

In every hospital and sick room, as much attention should be paid to ventilation as to meals.

come in contact with the outside air often enough to receive its effect, a contact which requires only a few minutes. It does not seem satisfactory, however, for patients who are carefully kept from such contact.

Accordingly, let us inquire by what possible means a drop in the outside temperature can affect the health of patients who are secluded as carefully as possible from every outside in-

fluence. Only two possibilities seem to present themselves. In the first place, changes in temperature are always accompanied by changes in humidity. This fact, as we have already seen, goes far toward explaining why cold weather has so bad an effect on health even when people are kept warm, but it does not help in explaining the stimulus of a cold wave. In fact, it would lead us to expect cold waves to be harmful. Not only is the capacity of cold air for moisture less than that of warm, but, as a rule, the air of cold waves in the eastern United States, with which we are now dealing, contains an unusually small percentage of moisture in proportion to its capacity, for it comes from the dry interior. Since dry air, except at high temperature, is harmful, the conditions of humidity in cold waves would tend to increase, not diminish the death rate.

The second possible means by which cold waves may stimulate sick people is through their effect on the variability of the air. Every one who has cared for a furnace knows that, when the temperature begins to drop out of doors, there is at once difficulty in keeping the house at the uniform temperature which is mistakenly supposed to be ideal. Not only the actual drop in temperature, but the wind which almost always accompanies it causes the temperature indoors

*The second of a series of two articles. Part I was published in the January issue of THE MODERN HOSPITAL.

¹Huntington, Ellsworth: Interpretation of the Death Rate by Climographs, Mod. Med., 1919, 1, 130.

to fall. Then the furnace draft is opened and, more often than not, the house soon becomes too warm. Next the windows are opened a little, and the temperature falls. So it goes, first this way and then that.

In many houses it is much easier to preserve a uniform temperature on a perfectly quiet day when the temperature stays steadily near zero, or only rises in response to the sun, than on a windy, blustering day when the thermometer falls from 30° one morning to 20° the next morning at the same hour. As a matter of fact, even the houses with the best heating system and the most solid, wind-proof walls are practically certain to be much more variable when the wind is blowing and the outside temperature falling than when the air is quiet and the temperature is either stationary or else gradually rising under the influence of one sunny day after another.

Variability Stimulating and Helpful

In spite of the common prejudice to the contrary, such variability is stimulating and healthful. This does not mean that drafts which cause a chill are desirable. They are merely an incidental feature which is a drawback in so far as people have lived under bad surroundings to such an extent that they have lost their power of resistance. The temperature can vary, however, without causing drafts. The effect of such variations is well illustrated in theaters and other large auditoriums where a change of a few degrees by reason of slowly descending cool air may wake up a dull audience and make it enthusiastic. In temperature, as in many other things, a uniform optimum is not nearly so good as frequent variations in one direction and the other. No one advocates a uniform diet even though it be ideal. If an absolutely ideal meal could be set before people three times a day for a year, does anyone believe that the persons thus fed would be as well as if they had been served with a great variety of good meals no one of which was quite so perfect as the ideal?

It is just the same with the air. We try to have uniformly ideal air in our houses in winter, and thereby we make two grave mistakes. In the first place, as has been pointed out in connection with humidity, we do not actually achieve the ideal, because as yet we scarcely know what conditions of moisture are really right; and in the second place, we try to attain uniformity, which is a mistake. Fortunately, while a cold wave is in progress we rarely succeed in obtaining a uniform temperature, and thus

although the dryness of the wave may do harm this effect is often overcome and reversed by the good effect of the attendant variability.

Now let us turn to operations. Only those which were followed by death after one to ten days are used in Table VII which sums up the whole matter for the Boston City Hospital. For the Massachusetts General Hospital the data are similar, but since our tables for that hospital include deaths more than ten days after the operations they are not included. Table VII shows the deaths per day after operations which were performed when the change of temperature indicated at the top of the table took place between 8 a. m. of the day of operation and 8 a. m. of the succeeding day. The response to changes of temperature is somewhat different in winter and in the remainder of the year, as appears in the two upper portions of the table. For example, from December to February there were 101 days when the temperature fell 9° or more from 8 a. m. to 8 a. m., and the operations performed on these days were followed by 38 deaths, or an average of 0.376 per day. The 52 days with a drop of 4° to 8° account for 19 deaths, or 0.365 per day, and so on until the 99 days with a rise of 9° or more account for 30 deaths or 0.303 per day.

Clearly the death rate after operations in winter is high when the operations were performed at the time of a marked drop of temperature and diminishes systematically as the drop decreases or as its place is taken by a greater and greater rise of temperature. This does not agree with what we have said as to the 400,000 deaths in New York, but this involves no real discrepancy. Patients who are undergoing operations, as we have seen, are peculiarly sensitive to humidity. Cold waves diminish the humidity; moreover, they are usually followed by periods of low temperature and dryness. Thus, although the variability arising from the drop in temperature may be beneficial, the dryness more than counteracts this.

In the next section of Table VII we see that during the rest of the year, from March to November, the death rate is lowest, 0.198, when the temperature drops most rapidly; it increases to

TABLE VII

DEATHS PER DAY AT AN INTERVAL OF 1 TO 10 DAYS AFTER OPERATIONS AT THE BOSTON CITY HOSPITAL PERFORMED ON DAYS WITH VARIOUS CHANGES OF TEMPERATURE FROM 8 A. M. OF THE DAY OF THE OPERATION TO 8 A. M. OF THE NEXT DAY.

	Drop of 9° or more	Drop of 4°-8°	Change of 3° or less	Rise of 4°-8°	Rise of 9° or more
Dec.-Feb.	0.376 (38-101)	0.365 (19-52)	0.326 (31-95)	0.315 (23-73)	0.303 (30-99)
Mar.-Nov.	0.198 (25-126)	0.232 (47-203)	0.343 (201-586)	0.331 (88-266)	0.292 (36-123)
Mar.-May	0.233 (10-43)	0.226 (14-62)	0.495 (105-212)	0.438 (42-96)	0.403 (21-52)
June-Aug.	0.229 (8-35)	0.187 (14-75)	0.293 (65-222)	0.279 (26-93)	0.281 (9-32)
Sept.-Nov.	0.146 (7-48)	0.288 (19-66)	0.204 (31-152)	0.260 (20-77)	0.154 (6-39)

a maximum 0.343, when the change from day to day is at a minimum; and falls again to 0.292 when there is a rise of more than 9°. This same relationship is evident in the shorter seasons into which the rest of the table is divided, although the figures are not quite so regular because of the comparatively limited body of data.

TABLE VIII
DEATHS PER DAY AT BOSTON CITY HOSPITAL AFTER OPERATIONS PERFORMED UNDER VARIOUS CONDITIONS OF VARIABILITY OF TEMPERATURE.

	Change of 9° or more in either direction.	Change of 4° to 8° in either direction.	Change of less than 3° in either direction.
Dec.-Feb.	0.340 (68-200)	0.336 (42-125)	0.326 (31-95)
Mar.-Nov.	0.245 (61-249)	0.288 (135-469)	0.343 (201-586)

From March to May the contrast between the favorable conditions of falling temperature and the unfavorable conditions of uniform temperature is particularly noticeable. From June to August it is not so striking, although clearly evident. In this section days with a rise of temperature are nearly as bad as those with little change, and would appear worse did not the days of rising temperature include many cases where unusually cool weather is followed by a rise to conditions which are almost ideal as to both temperature and humidity.

In the fall the figures are very systematic, but show a peculiar drop in the death rate at times when there is little change of temperature. This may be due to the fact that in the fall the days that are most nearly ideal as to both temperature and humidity are likely to occur during spells of fairly steady weather. Yet even so, the days with a marked change of more than 9° in either direction average only 0.150 deaths per day against 0.204 when the weather remains uniform.

The Margin of Safety Estimated

Table VII makes the advantage of variability so evident that it scarcely needs further comment. Yet it may be well to add together the days having a given degree of change without reference to whether the weather grows warmer or cooler. This is done in Table VIII. Here it appears that in winter the advantages due to a pronounced drop in temperature do not balance the accompanying dessication of the air. The difference between weather with great changes and that with few changes is slight, however, only 0.014.

During the rest of the year, however, the advantage of variability is great, for the days with a change of 9° or more have

0.098 less deaths than those having a change of less than 3°. To put the matter in another way, the average number of deaths per day from March to November is 0.305. If the conditions all the time could be like those which prevail when the temperature either rises or falls 9° or more, this death rate would be lowered by 19.7 per cent. Here, then, we have still another way in which a change in the air of our hospitals at the time of operations would theoretically produce an improvement of nearly 20 per cent.

Effects of Rising Temperatures

In this connection there naturally arises the question whether variability of temperature near the time of death is as important as at the time of the operation. This is answered in Table IX which shows the number of deaths per day when the indicated changes of temperature occurred during the 24 hours preceding and following 8 a. m. of the day of death. In certain respects, the tendencies shown in this table are the opposite of those in Tables VII and VIII. Thus during the winter, especially in section B which shows the actual day of death, rising temperature seems to be harmful, a condition which harmonizes with what has been learned as to deaths from diseases in general.

During the rest of the year, on the other hand, an extreme drop seems generally to be bad. The other figures are indeterminate in Section A of Table IX, but are like those of Table VII in Section B; that is, uniformity is worse than a change. Apparently Section B of Table IX shows a much more genuine relationship than Section A, which is not surprising since B gives the conditions on the very day of death.

Humidity After Operations

On that basis we may say that in winter changes of temperature several days after an operation have a directly opposite effect from changes at the time of operation,—which simply

TABLE IX
DEATHS PER DAY SUCCEEDING OPERATIONS AT BOSTON CITY HOSPITAL, AND OCCURRING AT TIMES WHEN THE INDICATED CHANGES OF TEMPERATURE TAKE PLACE FROM 8 A. M. TO 8 A. M.

	Drop of 9° or more	Drop of 4° to 8°	Change of less than 3°	Rise of 4° to 8°	Rise of 9° or more
A. Twenty-four hours preceding 8 a. m. of day of death.					
Dec.-Feb.	0.396 (40-101)	0.231 (12-52)	0.327 (31-95)	0.397 (29-73)	0.333 (33-99)
Mar.-Nov.	0.349 (44-126)	0.261 (53-203)	0.319 (187-586)	0.363 (98-266)	0.358 (44-123)
B. Twenty-four hours succeeding 8 a. m. of day of death.					
Dec.-Feb.	0.277 (28-101)	0.307 (16-52)	0.347 (33-95)	0.383 (28-73)	0.404 (40-99)
Mar.-Nov.	0.428 (54-126)	0.266 (54-203)	0.331 (194-586)	0.309 (83-266)	0.301 (37-123)

means that at the time of the operation humidity is the most vital factor, while at a later period variability assumes the more important rôle. From March to November, on the other hand, when extreme dryness like that of winter almost never prevails, variability is desirable at both times although a great drop of temperature may prove harmful. Such variability, however, actually has less effect at the time of death than at the time of the operation.

It is easy to secure such variability either by open window ventilation with glass reflectors at the bases of the windows to prevent drafts, or else by admitting cool air through ventilators whenever it is needed. This is as important and vital to the patient as the preparation of his diet. The greatest difficulty is likely to be to make nurses and hospital attendants feel the need of being as conscientious in this matter as in the matter of diet.

Another necessity is the avoidance of drafts by the use of screens or other devices, and the careful watching of patients to make sure that they run no risk of getting chilled. If all this were done, and

TO DIRECT RED CROSS HEALTH SERVICE DEPARTMENT



Dr. Erwin A. Peterson of Cleveland, Ohio, who has been named director of the newly-created special health department of the American Red Cross to direct certain phases of the organization's health conservation program.

DR. ERWIN ALBERT PETERSON, recently appointed director of the Health Service Department of the American Red Cross, is a graduate of Ohio Wesleyan University and of the Medical Department of Western Reserve University of Cleveland. He has had an extensive experience as an educator, a social worker, and a health executive, having been head worker of Goodrich Social Settlement for several years, and a teacher and director of the School Health Department of the Cleveland public schools, where he built up one of the strongest departments of the kind in the country. Dr. Peterson served as major with the American Red Cross Commission on Tuberculosis to Italy, during the war, and directed the Educational Hygiene Department. He is intimately acquainted with the different types of communities with which he will have to work, as he was born on a farm, spent his later boyhood in a town of less than 10,000 inhabitants, and after leaving college lived in a city. Dr. Peterson brings to his work a technical training supplemented by a very valuable social and educational experience. He is now located at National Headquarters, American Red Cross, Washington, D. C. The plan of the work which he is to undertake calls for cooperation with other existing health promotion and disease prevention organizations throughout the United States, the Red Cross acting alone where no other health agency exists, in an effort to reduce the high mortality due to preventable disease, and to improve general health conditions. Public health nurses will be assigned to many small communities.

if the suggestions of the first part of this paper were carried out, it seems fair to hope that an extremely powerful and effective agent would be added to the equipment of every hospital and every physician.

In the study of variability even more than of humidity wide cooperation is needed, and the author again asks for as many suggestions as possible.

Summary

With this we must leave the matter. The significant points are:

(1) Variability of temperature is as important as humidity, but its effects are obscured in winter when the extreme aridity of our winter houses is the dominating factor.

(2) Variations of temperature are more important at the time of an operation than at the time of death, although at both these times they have a large significance.

(3) Constant attention to variability during the entire time from an operation to the day of discharge from the hospital or sick room would apparently diminish the death rate by at least 20 per cent, in addition to the gain to be derived from proper humidity.

A HOSPITAL DISTINGUISHED BY BEAUTY OF GROUNDS, STRUCTURE, AND INTERIOR

BY THE REV. JOHN O'GRADY, SECRETARY, COMMITTEE ON RECONSTRUCTION, NATIONAL CATHOLIC WAR COUNCIL, WASHINGTON, D. C.

THE Misericordia Hospital, Philadelphia, Pa., is notable for its beauty of structure and for its location in a section of the city miles from any other hospital, and right in the heart of a manufacturing district. At present the hospital has a capacity of 200 beds, but this will be increased to 1,000 when it is completed. The building as it now stands consists of two-thirds of the main building, the first floor of the kitchen building, and the laundry and laboratory building.

The hospital may be seen from some distance as it is built on slightly elevated ground, and its approach is made even more attractive by brick walks and flower beds. The grounds and building have contributed greatly to the beauty of the surrounding neighborhood, which is made up largely of middle-class homes of working people.

The location of the hospital gives it a peculiar opportunity for social service work, and should make it an important center. A large car works plant lies about eight blocks southeast, one of the cities' largest bakeries about the same distance to the north, and manufacturing plants of different types to the south. There are no hospitals to the south for miles beyond the city, although there are a few to the north and east of this section.

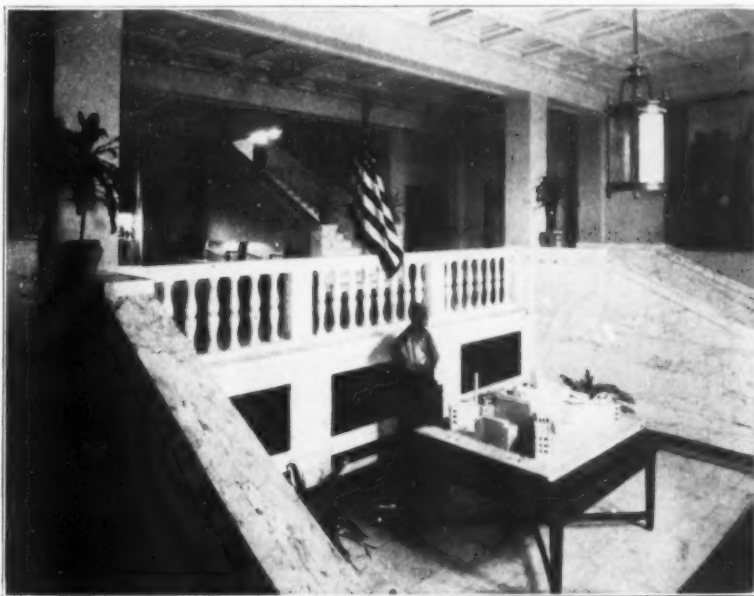
Entrance Hall Impressive

On entering the building one is impressed with its unusual beauty. A marble stairway just inside the entrance leads down from each side to what appears to be a big hotel exchange where one might register for expensive accommodations. In reality this is the main office of the hospital,

with a Sister in charge at the desk. This part is not observed when one enters because the door is a half floor below on the ground level. The white marble and tile setting, the contrasting rich, dark mahogany furnishings, and the fine paintings all contribute to the beauty of this entrance hall.

The superintendent's office and the hospital reception room on opposite sides of the hall are quite as impressive. Although the furniture is simple in design, perfect taste is everywhere displayed. A large part of the furnishings have been given by interested people who, in their zeal to

help the institution, have spared no money to secure just the right thing for the setting and for durable service. The corridors are furnished in tile and marble, as are all the corridors in the buildings, except those in the basement. There are several private rooms on this floor in a corridor extending from the office. The private rooms are comfortably though not luxuriously furnished. As yet



The entrance to Misericordia Hospital is one of unusual beauty. A marble staircase leads down from each side to the main office a half floor below on the ground level.

there are few private baths, but more will be included in the new wings.

The basement floor, which is really the ground floor, contains the dining-rooms for the entire staff, the superintendent of nurses' office, nurses' recreation room, x-ray department, pharmacy, emergency room, social service room, and a dispensary department composed of four rooms, in which seven dispensaries are operated at different hours. There is an operating room on this floor for all tonsil and adenoid cases, an examining room, a sterilizing and ether room, a dressing room, and a dark room for eye examinations. All

the rooms on this floor are of full-size window height.

The dispensary entrance is attractive inasmuch as it opens from the garden by a double door into a very large square hallway. In one corner is the desk for the social worker who admits the patients, and assigns them to correct bench to await their consultations with the doctor. The total number of new cases referred to the social service department by the hospital dispensary during the month of November, 1919, was fifty-five, and 130 cases previously referred from this



The pharmacy at Misericordia Hospital is at the opposite end of the hall from the dispensary, and is in charge of a Sister who fills all prescriptions.

source were continued during the month. Of the total number of new cases, thirty-three were ex-service men or members of their families, and fifty-nine were continuation cases of ex-service men. The hospital during the same month referred ten cases to the social service department, five of which were cases of ex-soldiers. The workers of the social service department interviewed 1,115 persons during the month and made ninety-eight visits. At the other end of the hall is the pharmacy window where prescriptions are filled by the Sister in charge. The patients pay a small sum of from five to fifty cents, or are given drugs free when necessary.

From the main hall, entrances open into the three wings, one of which contains the social service office, and some dispensary rooms. Another contains the emergency rooms, which have a complete operating room outfit, a restroom, and a supply room. The third corridor contains dispensaries.

The general kitchen and a diet kitchen for teaching purposes, the pantries, and cold storage rooms are in a separate wing on this ground floor, and are attached by what is known as a serving room. The serving room contains the food lifts

to various parts of the house, closets for dishes, and a sink where part of the dishes are washed. The food is sent to the departments in containers from steam tables so that each floor serves its own trays with the food piping hot. The kitchen department is finished with a very attractive and serviceable brick which may be readily cleaned with a hose. The diet kitchen, which is much like a private kitchen and dietary, is in charge of a Sister who is experienced in that line. The general utility department, although adequate for present needs, will, of course, need to be enlarged when the building is completed to accommodate 1,000 patients.

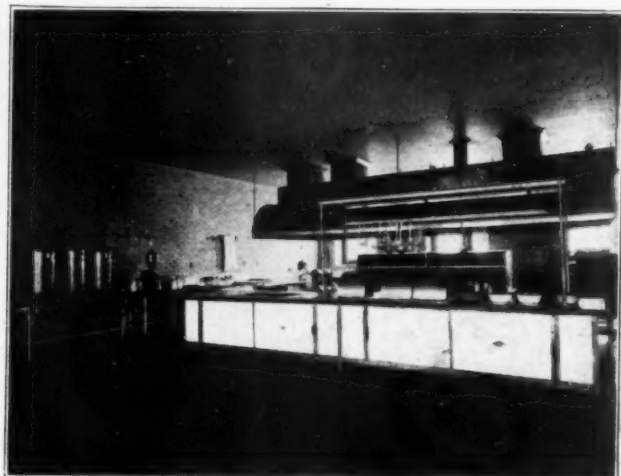
The second floor has private and semi-private rooms with one, two, three or four beds.

The third floor might be termed a ward floor. The wards have from six to eighteen beds. One has fifteen beds, another eighteen, and the rest range from six to ten beds each.

The fourth floor is entirely given over to the Hog Island Shipbuilding accident cases, which are paid for by the plant.

Maternity Department and Operating Room

On the fifth floor are two distinct departments, the maternity department and the operating room suite. The maternity department contains an operating room, sterilizing room, delivery room, nursery, bath, one private room, two semi-private (one containing two beds and the other three), and one ward with six beds. There are also two bathrooms and a diet kitchen. This department is in charge of an experienced graduate nurse.



The splendid equipped sanitary kitchen on the ground floor.

The next corridor contains the operating room suite which consists of two operating rooms, a sterilizing room, ether room, supply room, cystoscopic room, one scrub and dressing room for doctors, and one for nurses. There are two re-

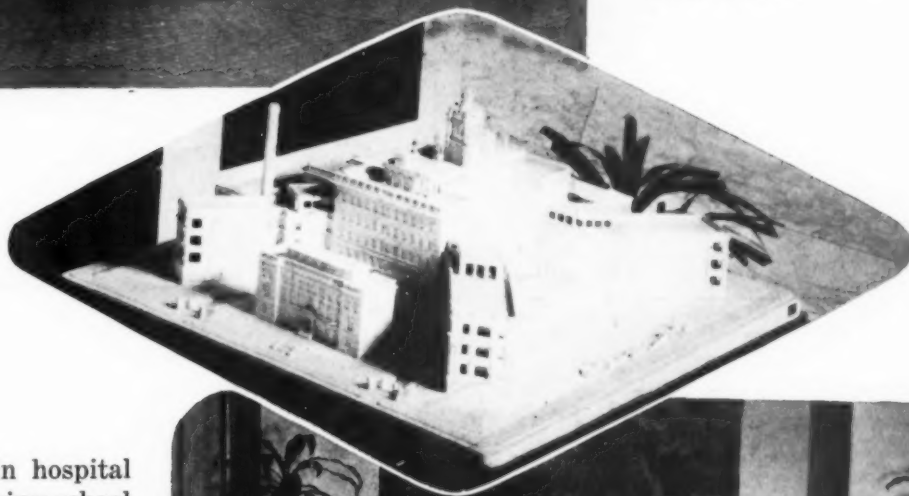
covery rooms where patients may thoroughly recover from ether before returning to the wards. The operating room is in charge of a Sister who is a graduate in nursing and has had several

more are in training. Two graduate nurses are employed who are graduates of Catholic hospitals, one as anesthetist and one in charge of the maternity department. Two Sisters are graduates



On the sixth floor of the main building of the Misericordia Hospital is the roof garden, built in the architectural style of the monastery buildings of long ago, with beautiful, covered passageways supported by huge columns. Part of the roof garden is uncovered. On this floor are classrooms for the nurses, doctors' rooms, a compact isolation suite containing two bedrooms, a bathroom and a separate shower bathroom.

As one passes through the main entrance, his eye is attracted to a miniature model of the Misericordia buildings which gives a glimpse of the hospital as a whole and leaves an impression of stately beauty.



years of experience in hospital management and training school work in New York City. The nurses wear regular operating costumes similar to those worn by the doctors, and the Sister in charge also wears white.

On the sixth floor of the main building is the roof garden, built in the architectural style of the monastery buildings of long ago, with beautiful covered passageways supported by huge columns. Part of the roof garden is uncovered. On this floor are classrooms for the nurses, doctors' rooms, and a very compact isolation suite, containing two bedrooms, a bathroom, and a separate shower bathroom. The main hall contains general bath and laboratory, and entrances to two fire towers.

Training School of Hospital

The Training School of the Misericordia Hospital has fifty students, all Catholic except two. The Sister in charge is a registered nurse. There are six Sisters who are graduate nurses and two




Rich tapestries and paintings blend harmoniously with the dark mahogany furnishings and delight the eye of the visitor to the reception room.

in pharmacy and one is a laboratory technician.

The following figures give an idea of the work of the Misericordia Hospital since it was opened:

Number of patients admitted.....	2,692
Number of patients who died.....	176
Number of dispensary patients.....	11,003
Number of social service patients....	295
Total number of patients treated in hospital and dispensary.....	13,695



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A STUDY OF THE DISPENSARIES IN NEW YORK

THROUGH the courtesy of Dr. E. H. Lewinski-Corwin, the executive secretary of the Public Health Committee of the New York Academy of Medicine, we begin, on page 137 of this issue, the publication of three chapters of the study of the New York dispensary situation in which the Public Health Committee of the New York Academy of Medicine have been engaged during the past year. These three chapters were selected from the report because of their special interest to dispensary and hospital executives. They carry the captions: "Organization, Administration, and Equipment of Dispensaries," "Medical Organization," and "Book and Record Keeping."

The findings and conclusions of this important study are extremely interesting and enlightening but space limitations forbid more than a brief summary.

Some conceptions of the magnitude of the New York dispensary problem is gained from the figures given in the report. There are in Greater New York 153 licensed dispensaries in which about 4,000,000 treatments are given annually. To encompass this amount of work 3,680 sessions are held weekly with about 8,000 hours of actual operation. It is worth while noting, however,

that out of the total number of clinic hours per week only a little over two and one-half per cent are held in the evening.

Eighty per cent of the patients came with complaints which required treatment in departments other than internal medicine. This means that a large part of the wage-earning class resorts to the dispensaries when in need of the services of specialists or special examinations and treatment for which they cannot afford to pay the private physician.

The study corroborates the findings of other investigations on the question of so-called "dispensary abuse." Two and two-tenths per cent of the patients were palpably taking undue advantage of the dispensaries; 79.4 per cent, because of their low economic status, were justified in seeking the dispensary for treatment; and the rest because they sought treatment which they could not get elsewhere at the prices they could afford to pay. This points to the need of pay clinics, and the committee suggests the adoption of a fee of fifty cents for such as are able to pay. This fee is within the reach of the majority of wage earners and would materially increase the present income of the dispensaries and enable them to provide necessary equipment, pay salaries to some or all of the physicians, and employ greatly needed clerical, nursing, and social service workers.

The committee found that in most of the institutions there was need of a clearly defined policy and of better executive direction. In the larger institutions it is felt that a full time executive should be employed.

No accurate figures were available as to the total amount of money invested in the dispensaries of New York City, nor were accurate figures to be had as to the cost of maintenance and administration. A conservative estimate, based on the reported expenditures for the year 1918 of thirty-four dispensaries in the United Hospital Fund, places the cost of maintenance and administration at \$2,000,000 per year. Institutions representing such an investment and expenditure have a very definite responsibility to become institutions for efficient diagnosis and treatment, public health centers in their neighborhoods, and efficient training schools for doctors, nurses, and social workers, but thus far the New York dispensaries have failed to develop to the fullest extent their medical and educational opportunities.

In order to increase the efficiency of dispensaries, the committee cites some of the possibilities of efficient organization, and recommends reduction in the length of the period patients must wait prior to admission to the clinic. This can be

accomplished by a system of appointments, the feasibility of which has been demonstrated by the American Red Cross Clinic for Children at Le Havre, or by the principle of limitation of numbers. The application of either of these principles will not only reduce the waiting time of the patient but will prevent the swamping of clinic physicians with numbers of patients whom they cannot treat efficiently.

The committee deprecates the assignment of patients to different departments by lay registrars and, except where the diagnosis is obvious, recommends that a diagnostic division be organized to which patients may be referred for examination and assignment to the appropriate department.

To give patients the greatest benefit from medical skill, the equipment of dispensaries with all modern facilities for doing accurate diagnosis and efficient treatment is recommended. Reduction of the number of clinics and their re-grouping may sometimes help to improve the methods for assigning patients and also expedite this work.

To retain the sustained interest of physicians, a medical organization correlating the dispensary service with that of the hospital in such a way as to give the younger physicians an opportunity for advancement is recommended. In detached dispensaries it is recommended that arrangements be made with medical schools for organizing postgraduate instruction in order that the whole field of clinical work of the city may be permeated with the spirit of research and teaching, and in order that all existing facilities may be put to the most useful purposes.

Adequate medical records are regarded as essential to good work and the scientific use of clinical material. The committee, however, found that adequate physical examinations were recorded in less than one-fifth of the cases treated in the dispensaries investigated. The more general use of the clinic secretary for the smooth and expeditious running of the clinic is recommended as well as an effective follow-up system.

Investigations revealed an inadequate nursing personnel in the dispensaries and to remedy this situation the committee recommends that more of the dispensaries connected with hospitals adopt the plan inaugurated in some institutions where a part of the course in the training schools for nurses is devoted to dispensary work, the course being so arranged that each of the pupil nurses has several months' experience in the dispensary under the direction of a head nurse.

The committee recommends that a Social Service Department be incorporated in the administrative plan of the dispensaries and calls attention

to the need for a concentration of effort on the part of all who are interested in social service work to secure a crystallization of function and procedure.

PHYSIOTHERAPY IN THE HOSPITAL:— AN OUTCOME OF THE WAR

OUT of the war have come many things, not all destined to survive. Now is the time to weed out what may be spared and to cultivate what is best worth while. Among many gains in surgery none has counted for more in sheer results than the coordination in after-treatment characteristic of the best war work. And in this after-treatment, as Dr. Frederic J. Cotton of Boston so convincingly points out in his article on "The Need for War-Trained Physiotherapy Experts in the Hospitals," on page 101, a very large rôle has fallen to physiotherapy.

In the plans laid down by General Gorgas in the summer of 1917, the note of physical reconstruction was for the first time clearly sounded in public and the importance of physiotherapy recognized. Hitherto this phase of therapy had received little consideration, in fact, the word was new to most of us. As now understood, physiotherapy takes in massage and other manipulations, heat in its various applications, light in its various forms, hydrotherapy (let us say baths, hot, cold, medicated, electric—and be done with the old quackish title!), electrotherapy, exercise and drills (normal and corrective), and curative shop work.

In planning the department of physiotherapy, Dr. Gorgas had as his basic theory the grouping of all its component subdivisions into a coherent whole to be put at the service of the surgeon for the after-care of his patients—for the sort of after-care that spells results. Accordingly, the plan was worked out in an efficient manner on this theory.

In the beginning, almost insurmountable difficulties were encountered, due to the lack of suitable and trained personnel. Before the war there were, to be sure, a few good electrical specialists; there were many doctors with impressive, snappy, static machines of no earthly value in the office; there were many "bakers" abroad in the land. Hydrotherapists, though few in number, were eager and ready to cure almost anything, but by one method only. There were "physical culturists" and faddists in legions, but of genuine physiotherapists, there were few.

Most of the surgeons knew little about the possibilities of such work, but they learned a great deal about it because they were seeing the work

and the results on their own patients, and as they learned they grew enthusiastic.

The doctors assigned direct to the physiotherapy department got out of special ruts to which many of them had been subject, such as dependence on electricity alone, or baths alone, and by closer association with the surgeons, they got a clearer picture of the limitations and actual purpose of their work.

The next problem that had to be faced was the problem of securing women aides to work under the supervision of the surgeons. Before the war there were many women elaborately trained in a "system" of physical culture and massage, who had no inkling of what they were trying to treat, or what the relation of their work to that of others was. There were countless women, moreover, who did not have even this intensive, narrow training. The really intelligent and trained workers were but few and these were handicapped, on the one hand, by lack of proper equipment, and, on the other by distrust on the part of the doctors. But as Dr. Cotton points out, the war interests brought many applicants, and out of these the women of real quality were picked, registered, and given special courses of training in approved schools. The result was a goodly supply of women, not particularly experienced at the outset, but prop-

erly trained for work they had to do.

With the war ended and with the fact staring us in the face that we have more industrial cripples than war cripples, would it not be utter folly to allow these trained forces to become dissipated instead of using them for the rehabilitation of the industrially crippled?

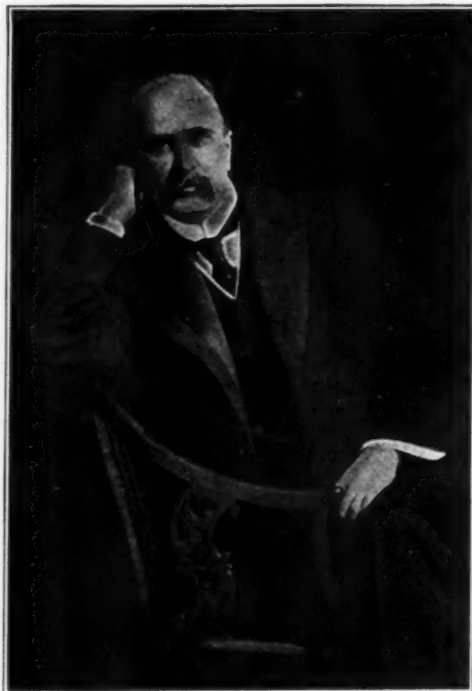
If we are to use them in this manner, how are we to go about it? Such work does not lend itself readily to individual effort. In the war it was a coordinated job. It must be so in peace. That means it must be some sort of a hospital job. Is your hospital to-day equipped to restore the man with a broken leg to final usefulness as it should, to take full care of a case on which you do a nerve suture, or to restore a mangled hand to use after healing?

To-day we have as never before a knowledge of what to do, an experience in the practical doing of it, and a personnel of doctors and aides trained to the job.

The work is important and the cost is in no proportion to the results achieved. Dr. Frank Billings, while in the service as head of the Division of Physical Reconstruction, under the Surgeon General, gave it as his opinion that every hospital should have a department of physiotherapy just as it should have an operating room.

Is it not about time that the hospitals went about establishing these

DEATH COMES TO SIR WILLIAM OSLER AT OXFORD HOME



SIR WILLIAM OSLER—1872-1920

SIR WILLIAM OSLER, noted physician and author, died December 29, after an illness of several weeks at his home in Nordham Gardens, Oxford, England, aged seventy years. He was born in Canada and received his medical degree from the McGill University, Toronto, in 1872. It has been said that he was a "specialist in all branches of medicine." He was well known in the United States, having been professor of medicine at the University of Pennsylvania, and at the Johns Hopkins University, Baltimore, from 1884 to 1904. He resigned the latter position to become regius professor of medicine at Oxford, the highest honor in the bestowal of British institutions of learning. He was the author of many books of medical research and of philosophical studies, and his fame as a joker and as an epigrammatic and witty member of society was widespread. It was in 1905 at the commemoration day exercises at the Johns Hopkins University that Dr. Osler in an address spoke of the "comparative uselessness of men above forty years of age," which remark in garbled form went around the world and was the subject of criticism by the public and press generally. Dr. Osler, after remaining silent for a considerable period, declared in a statement that he did not say that men at sixty should be chloroformed, but that in his opinion, the telling work of the world has been and is being done by men under forty years of age. He, however, refuted his own theory by remaining at work until the end. He was knighted by King George in 1911.

departments, before the doctors, trained in physiotherapy, get back into their little special practices, and before this great group of trained and experienced aides drift back to their old positions or to new jobs for lack of opportunity in the work in which they have become expert during the last two years?

Is not your hospital going to have a physiotherapy department start this winter, as big as possible, with the best possible doctor in charge? If this is not possible, will you not, at least, employ a trained physiotherapy aide to work under the surgeon and to serve as a nucleus about which further development can grow?

SUBSIDIZING COUNTY TUBERCULOSIS SANATORIUMS IN CALIFORNIA

IN this issue of THE MODERN HOSPITAL (page 83) are published three interesting articles on the Arroyo Sanatorium, which is one of many county institutions subsidized by the state of California. For the information of those who are confronted with similar problems in other states, THE MODERN HOSPITAL gives the following brief review of events which led to the California "experiment."

In 1911, the writer was instrumental in having the legislature authorize the creation of a commission of five who were directed to investigate the problem of tuberculosis in the state and to recommend adequate measures for its control. The members of the legislature were much interested in providing better care for the tuberculous sick but marked differences of opinion existed as to the advisability of establishing state sanatoriums,—in fact, bills introduced at various times since 1904 failed to pass. At the session of the legislature in 1913, the Commission on Tuberculosis presented a constructive program which advised against the erection of state sanatoriums but advocated subsidizing county institutions for tuberculosis by the state. It further recommended the creation of a Bureau of Tuberculosis to be controlled by the State Board of Health, whose function, among other things, would be to visit county hospitals and inspect the service rendered to tuberculous patients. The example set by California resulted the following winter in the creation of similar bureaus of tuberculosis under state boards of health in New York, Ohio, and Wisconsin.

Subsequent investigations made by this bureau revealed intolerable conditions,—in many hospitals advanced cases of tuberculosis were not segregated but placed in general wards, in others the standard of care compared with that prevailing in the average almshouse.

Conferences with interested organizations were held by the Board of Health and it was agreed that the establishment of one or more state sanatoriums would be utterly inadequate to care for the large number of persons requiring proper hospital treatment. Hence in 1915, the legislature, upon united recommendations of interested agencies, adopted the "subsidy plan," which authorized payment of three dollars per week for each resident tuberculous patient to counties maintaining sanatoriums or tuberculosis departments in hospitals that complied with the standard of construction, equipment, and maintenance required by the State Board of Health.

In determining eligibility for the state tuberculosis subsidy, hospitals are graded by the State Board of Health according to location, construction, treatment and care of patients, and diet. Location and grounds count one to five points. Construction and type of building, one to twenty-five points. Treatment and care, one to thirty-five points. Diet, one to thirty-five points. A hospital must receive a total of eighty per cent to be eligible for the state subsidy.

Frequent inspections are made by representatives of the Bureau of Tuberculosis of all subsidized county sanatoriums and hospitals, which now exceed twenty in number, totalling over two thousand beds and representing over two million dollars expenditure in construction alone. When the standard of the institution falls below that required by the bureau, the state subsidy is discontinued until the causes which have been complained of are removed. Every assistance, however, is accorded by the bureau to the county institutions in maintaining and raising their standards; for example, the vocational worker who has developed occupational therapy at Arroyo Sanatorium is employed by the state. The California plan of state subsidy following standardization has been so eminently successful within the short period of four years that the county tuberculosis institutions now compare favorably with first-class private sanatoriums.

R. G. BRODRICK.

ORGANIZED COMMUNITY GIVING FOR HOSPITALS

THE development of community unions or welfare federations for the collection of maintenance funds for charitable and social welfare work as well as for hospitals, probably has been definitely established as a sequence of the community inspirations provided by the Red Cross "war chests" or "patriotic fund" drives. The collection of Red Cross funds by the united grouping of community and municipal organizations

during the war developed a machinery and background that has enabled several cities to provide a community plan of giving. Successful drives for funds for both local and foreign expenditures have been carried out with the cooperation of the Red Cross in several cities during 1919; notably, Detroit, Cleveland, and Rochester.

The rapidly growing industrial cities present a new problem in hospital work, in that existing hospitals have failed to register an increase in bed capacity corresponding with the increase in population. Bequests or gifts for the erection of additions to existing hospitals have not been forthcoming, nor have new institutions been provided to meet the emergency. The city of Detroit is an example. A recent survey conducted under the auspices of the Detroit Community Union demonstrated that there was an immediate need for 4,000 beds. It was shown that during a stated period the city had increased in population 500,000, while the increase in hospital beds was less than 1,200 (comprising all classes of hospital accommodations, including tubercular, contagious, and maternity).

In many cities, organizations that have been dependent upon local solicitation have been provided for by organized community giving. The success of these plans has drawn attention to this method of giving as applied to the community needs for hospital additions. If the collection of maintenance funds for established hospitals and civic charities is a logical and economic procedure, the same argument applies to the collection of funds for the capital expenditures of hospitals. Economic conditions, local requirements for accommodations of industrial cases, and civic and community interests demand that organized community effort be made to supply the shortage of hospital beds. The inclusion of a program of capital expenditures in the community budget enables the boards of trustees of hospitals to take into partnership the entire community, who annually would furnish the sinews for a carefully checked and approved budget of capital expenditures for the general hospitals and charitable organizations. The program should be all inclusive, embracing the Young Men's Christian Association, the Young Women's Christian Association, Salvation Army, Hebrew and Catholic charities, and public hospitals, even though privately endowed.

The objection has been raised that community giving will result in limitation of private benevolence. This can be met with the statement that instead of a small part of the community, the entire community will be uplifted and raised to the level of the good Samaritan. The business

and industrial element, in one city at least, has given the plan definite and substantial endorsement. Instead of sixty to eighty tag days and isolated campaigns for funds, the process of giving can be encompassed in one check. The compression of eighty campaigns for funds into one has an economic appeal that is unanswerable in the saving of time and expense for solicitation.

Community giving for maintenance or capital expenditure should have the organized cooperation of the local Red Cross, the membership rolls of which may be inclusive therein. What greater peace-time function can be assumed by this noble organization than that its thousands of local chapters participate officially in the community campaigns as outlined above. Instead of gradual development along economic lines, many hospitals have heretofore waited for their patron saints to die and leave them bequests. Is it not time that the expansion of hospitals be dependent on more highly organized endeavor than the benevolence of a few?

Practically no hospital construction was carried forward during the war, and the opportunity for the utilization of community endeavor has never been presented more forcibly than at present. Let us strive for community giving for capital expenditures of hospitals and charitable institutions, and attempts to establish for all time a logical and economic system of expansion to meet the needs of the community.

W. L. BABCOCK.

SERIES BY MISS CHAPIN TO BE CONTINUED IN APRIL

THIS month's installment of Miss Mary Katherine Chapin's series of article on "Some Small Communities and What Their Hospitals Mean to Them" has been delayed and would ordinarily appear in the March issue of THE MODERN HOSPITAL. Inasmuch as this issue will be devoted largely to articles reviewing events and progress in the various departments of hospital life during 1919, Miss Chapin's series will be continued in the April issue.

ANNUAL REVIEW NUMBER IN MARCH

IN the March issue we shall publish a group of articles reviewing developments and progress in the hospital field during 1919 from a number of angles. Among the subjects upon which articles will appear are nursing, dietetics, dispensaries, standardization, nursing education, social service, hospital architecture and construction, hospital administration, drugs and chemicals, x-ray, occupational therapy, and venereal

diseases. This issue will also contain an interesting article by Lieut. Col. Floyd Kramer and Capt. Russell H. Kettell giving a comprehensive review of the organization of the army hospital service during the world war.

HOSPITAL SURVEY IN INTERCHURCH WORLD MOVEMENT

By DR. FRANK CLARE ENGLISH, Superintendent, American Hospitals and Homes Division, Interchurch World Movement, New York City

The Interchurch World Movement is making a survey of the hospitals of the Protestant Evangelical churches in the United States. This movement is only a year old and has grown with marked rapidity. Nearly 1,400 people are at work in the offices in the Greenhut Building in New York City, and in the field. The Interchurch Movement has as its aim not church unity, but cooperation in seeking common objectives, through methods best suited to each denomination, by twenty million Evangelical Protestants in the United States.

The first and great task of the Interchurch World Movement is the survey of the fields and work of the churches in all departments, in order that methods and needs may be made plain. When completed, this survey will be published in several volumes which will set forth the work of the Protestant Evangelical churches of North America in every continent of the world. As a result of this world survey, a budget will be formed to care for the needs of the work in terms of men and money. The Hospitals and Homes Division of the survey is concerned with the hospitals, homes for the aged, and homes for children, in the United States, Hawaii, Alaska, and Porto Rico.

Survey to List All Hospitals

The survey of the hospitals of the Protestant Evangelical churches alone justifies the work of this division of the Interchurch World Movement, as it was found that few denominations have published lists of their hospitals. Through research workers, correspondence with church boards, records from state charities, letters to 3,100 county survey supervisors, and through the hospital field investigators, a list is being compiled which will give the name, location, and denominational control of the hospitals found. All hospitals will be listed, but only those of Protestant Evangelical denominations will be surveyed and included in the financial askings.

The method of the survey is first by a letter of explanation and a five-page questionnaire sent to each hospital. The questionnaire is to be filled out by the superintendent and certified to by the local hospital board. The second approach to the hospital is by the field investigators, who gave a written report of each institution visited. Fifteen specially trained men are now making such visits in the United States and will ultimately inspect each hospital.

How Budgets are Prepared

The reports secured by questionnaire and investigators are studied by office experts and from these an estimate is made of the work and needs of each institution. When the results of these investigations are tabulated they are reviewed by an Advisory and Budget Committee, made up of institutional men of the various denominations. All the findings and estimates will be placed before a

meeting of the boards of all the Protestant Evangelical denominations. A budget of askings will then be adopted and a date set for a united campaign to secure adequate funds. The thoroughness and fairness of this method is shown in that the work and asking of each hospital will have been passed upon by its own local board, by the field investigator, by its own church board, by the survey office, by the Advisory and Budget Committee, and finally by the "All Board" meeting.

Object of Hospital Survey

The objects of the survey are: (1) To obtain information concerning the organization of each institution. (2) To secure a statement of the property and equipment of each hospital. (3) To ascertain the extent of efficiency, economy, administration, and adequacy of financial support. (4) To ascertain its needs in order to fulfill a larger mission with a greater degree of efficiency. (5) To estimate what it could accomplish with enlarged facilities.

Not all the hospitals are participating in the askings through the Interchurch World Movement. But it is greatly desired that each institution receiving a questionnaire shall fill it out, so that the printed survey volume will record its location and work.

The facts already revealed are startling and are stirring the church. Good authority has been given out that of the 7,000 hospitals of all character in the United States. The Protestant Church possesses less than 700 hospitals in the United States, and has a great opportunity for service for God and humanity. This limited number of hospitals has accomplished great things. It is estimated that they have given away \$10,000,000 annually in free service and care for a million patients each year. Yet 5,000 sick are refused every day, because of lack of room.

The church is awakening to the great service rendered by its hospitals. They are a great agency of Americanization. Foreigners and Americans are treated alike. One hospital in New York City treated patients of forty-three nationalities last year. Two out of three of these were foreign born. Reconstruction is a fact of peace-time hospital work, as well as of war-time. Men are made fit for the world's work. The church finds its great opportunity for evangelization through its hospitals. Patients are in great need of the cheer, courage, and hope of the gospel message and are most receptive. No finer ministration of the Christ can be found than healing the sick, comforting the sorrowing, giving hope to the dying, as did the Great Physician. One church hospital has as its motto, "All healing is divine healing." Christ is ministering today in the hospitals. There might be placed over the entrance of each hospital these words—

"Not race, not money, nor creed,
Need alone opens the door."

Where is Christ's work better shown?

Objectives of Interchurch World Movement

Some of the objectives of the Interchurch World Movement are: (1) To enable the hospitals to be more efficient. (2) To establish hospitals for the aged infirm. (3) To aid tuberculosis hospitals in favorable climes. (4) To provide sanitariums for healing and rest. (5) To provide hospitals for incurables. (6) To assist new hospitals in needy centers. (7) To provide clinics for children's welfare. (8) To conduct dispensaries and clinics for the treatment of venereal diseases.

The realization of such a program will include cen-

tralized, specialized, and standardized hospitals, and the discovery of reinforcement for home and foreign mission hospitals.

With other work and needs, that of the hospitals will be thoroughly presented to the churches throughout the United States. Seventy-two state conferences have been held during December, 1919, attended by delegates from the counties of the different states. Beginning January 28, 1920, a Training Conference for all Protestant pastors is being held in each capital. A National Conference of Laymen will be held in Pittsburgh, January 31, and February 1 and 2, 1920. Besides these, county and township conferences are to be held. In all of these the work of the hospitals will be presented. The Protestant Church, when shown the appalling needs, will care adequately for the hospitals.

WOMAN'S AUXILIARY HOSPITAL BOARD REVIEWS ACTIVITIES

The record of the achievements of a band of women during thirty-five years of faithful endeavor in the ever-broadening field of hospital work formed one of the principal features of the program at the thirty-sixth annual meeting of the Woman's Auxiliary Board of the Presbyterian Hospital, Chicago, which was held in the chapel of the hospital, Monday, January 5, 1920. About 175 of the more than 200 members were in attendance.

After the invocation and the reading of reports, Mrs. Patterson, chairman of the nominating committee, nominated the following officers. They were unanimously elected.

President, Mrs. Perkins Bass; vice-presidents, Mrs. David Graham, chairman, Helen B. Drake, and Mrs. Henry M. Curtis; recording secretary, Mrs. C. Frederick Childs; corresponding secretary, Mrs. Frank Penfield; treasurer, Miss Mary Reed; assistant treasurer, Mrs. William R. Tucker; honorary presidents, Mrs. McCormick, Mrs. O. S. Newell; honorary vice-presidents, Mrs. Timothy Blackstone, Mrs. William Blair, Mrs. E. A. Hamill, and Mrs. Frederick W. Crosby.

Mrs. David Graham, the retiring president, devoted eleven years to the duties of the office, and it is largely due to her efficient leadership that the affairs of the Board are in such a prosperous condition. Instead of the customary annual report, Mrs. Graham, as the crowning labor of her long incumbency, compiled an historical sketch of the Presbyterian Hospital with special reference to the work of the Woman's Auxiliary Board during the thirty-five years of its existence.

The sketch contained a vast amount of statistical information, so cleverly interwoven with reminiscences of events, both humorous and pathetic, and of the women who have given of their time and talent throughout the years, that, instead of being a dry as dust report, it was a living human document which will be a valuable acquisition to the hospital's annals. Of special historical interest is the following:

The charter of the Presbyterian Hospital was granted in 1883, the organization being completed in December of the same year. Its inception was the need of Rush Medical College for a hospital for clinical teaching, and the first building was constructed on land owned by the college just north of its building. It was the seventh of any importance in the city, the others being Cook County, Mercy, Michael Reese, St. Luke's, St. Joseph's (and Alexian Brothers). The first donations were from influential Chicagoans. Mr. Tuthill King, whose son-in-law, Dr. Joseph P. Ross, was a member of the faculty of the

college, gave the first \$10,000. Rush Medical College reserved the right to appoint the hospital staff. The matter of further financing the hospital was taken up the following year by the Presbyterian Social Union, with



Mrs. Perkins B. Bass, Evanston, Ill., newly elected president, Woman's Auxiliary Board, Presbyterian Hospital, Chicago.

the result that Hospital Sundays began to be observed in the various churches, when contributions were received for the institution.

"At the same time," said Mrs. Graham, "a Ladies' Aid Society was formed, for no sooner was the Board of Managers organized than its members found they could not stand alone, but, like Adam, needed a helpmate, and so loud was their cry that in May, 1884, Eve appeared as personated by eighty-two energetic Presbyterians equal to the emergency." The dues were a dollar a year, and the meetings were held elsewhere until the new chapel in the present building was ready for occupancy.

The name of the organization was changed in 1908 to "The Woman's Auxiliary Board of the Presbyterian Hospital."

From the first, the main work of the Board has been looking after the furnishing of the hospital, and the various additions which have been made to it, but many other duties have also fallen to its portion.

The original capacity of the hospital—eighty beds—was increased in 1887 to eighty-five beds by the building of the Hamill Wing, which cost \$12,000. The Jones Memorial, erected and furnished by the heirs of Daniel A. Jones at a cost of \$110,000, with an endowment of \$55,000, was dedicated in 1889, and increased the estimated value of the hospital to \$250,000, and its capacity to 225 beds.

Both the membership and the activities of the Ladies' Aid Society were increased, and various ways had to be devised to meet the growing demands of the hospital in furnishings. At first the money and donations were solicited. Later, associate memberships added materially to the fund; Tag Day was inaugurated and the treasury

in this way was enriched \$25,000. Tag Beds Nos. 1 and 2, with money on hand for the third, indicate the use to which part of the money raised in this way was put. A wet nurse has also been supported by the Tag Day funds, and a pre-natal nurse is to be employed.

Beginning with 1895, the Board directed its energies toward raising money by means of a series of concerts, for which such artists as Melba, Nordica, Fremstad, and other operatic stars were secured. Many amusing incidents lightened the drudgery of these enormous undertakings. For instance, Fremstad failed to arrive on schedule time and when she did put in appearance gave way to a fit of "temperament" because the accompanist had not been kept waiting twenty-four hours at the hotel in order to be there when she was ready to rehearse. The happening increased the strain on already frayed nerves, but is amusing in retrospect. The expense of these entertainments was heavy, but in consequence, large sums which were badly needed found their way into the hospital treasury. Five concerts netted the Ladies' Aid \$13,131.

Money contributions for delicacies—particularly fresh fruit—have amounted to more than \$15,000, to say nothing of the thousands of glasses of jelly, and the thousands of quarts of grape juice (and other beverages which led some to say that the hospital had not gone dry) which have been donated.

In 1890, the Society contributed \$1,094 toward the first ambulance, which did service for four years. An annual payment for free beds by the Society, the endowment of a child's free bed, and the endowment of rooms and beds by individuals have been some of the results of the activities of the members. At the suggestion of the superintendent, Mr. Asa S. Bacon, they secured the endowment of a room for missionaries and ministers home on furlough. Then there are the "Sunshine" Bed and the "Cheer Up" beds, all permanently endowed through the efforts of the ladies. Sunday schools have been interested and are also giving valuable aid.

The erection of the Private Pavilion in 1908 increased the capacity of the hospital to 275 beds, which also increased the work of the Auxiliary Board, as it was then rechristened.

Beginning with 1910, the raising of money was largely provided for by the Pledge Fund, and through this \$35,660 has been added to the treasury of the Woman's Board. This Pledge Fund Committee was succeeded in turn by the New Contributors' Committee, which in four years secured \$6,500. Indicative of the careful manner in which the Board has managed so that the most might be secured with the least possible outlay, is the fact that since 1915 it has come into possession of seventy dozen teaspoons and seventeen dozen dessert spoons by the collection of soap wrappers.

Social Service came in with the election of Mrs. Graham, the Presbyterian Hospital being the first hospital in Chicago to take up this kind of work. The plan in force at the Massachusetts General Hospital was the one followed. This is supported entirely by the Woman's Board. The Board also pays part of the expense of the Occupational Therapy Department which was established as an adjunct to Social Service.

Feeling that the accomplishments of the hospital as a whole should be made a matter of record, Mr. Bacon, in 1909, urged the ladies to begin the publication of *The Bulletin*. "This quarterly was never intended as a money venture," says Mrs. Graham, "but so valuable is it as history, that if its expense to the Board were doubled, it would be worth its cost."

Deciding to put some of the funds where they would

do permanent good, the Nurses' Alumnae Association was presented with \$5,000 for the Mary Byrne Memorial Room, and \$5,500 was donated toward the Ministers' and Missionaries' Room. Lately, the Board has joined with the nurses' student body in creating a fund known as the Gladys Foster Memorial in memory of the second nurse to die while in the Training School. This fund will be used for a special nurse for ward patients. There is one other endowed nurse for ward patients, the fund being known as the Helen B. North Fund.

With the institution of the Pledge System, the method of appropriating funds for various obligations was changed. The money obtained through the Pledge and Contributors' Funds is not used the year in which it is collected, but is held over as a basis for the next year's work. To this amount is added that collected through Associate Memberships, Active Dues and the Linen Fund, so that "having our cloth on hand, we can cut our garment accordingly," reads the report.

And so the work of this band goes on, a work worthy of emulation by women all over the land. The records show a grand total of \$369,536 collected during the thirty-Associate Memberships, Active Dues, and the Linen Fund, five years of its existence.

In September, 1884, the Presbyterian Hospital had forty-five beds, one intern, eight nurses, and a few em-



Retiring President, Mrs. David W. Graham, who for eleven years led the Woman's Auxiliary Board of the Presbyterian Hospital along the paths of progress.

ployees. In January, 1920, it had 437 beds, 230 pupil nurses, twenty-nine head nurses, 255 employees in the hospital building, and forty in the nurses' home. It cares for approximately 10,000 patients annually and has cared

for 131,173 patients, of which a fourth have been free.

"The first organized charitable work done by women in the United States was begun in Philadelphia in 1795, by an influential Quakeress who established a charity school for girls, and a relief society which is still in operation there, and," reads the report, "we are a portion of the rich fruitage of that seed. We also know that our success and usefulness are due to our unity of purpose and action. Created for business, we have adhered to the original purpose. And in the words of the president of the Board of Managers, the work of the Board is epitomized: 'In all ways an able assistant to the Board of Managers, in many ways undertaking and accomplishing work that the Board could not do, the Woman's Auxiliary Board is constantly developing in efficiency and importance.'"

BLIND MEN TAUGHT NEW OCCUPATIONS AT CHICAGO LIGHTHOUSE

By EDITH L. SWIFT, Chicago Lighthouse.

When a blind man's brain is trained to receive messages through sensory channels other than his eyes, that man is once more a normal human being, handicapped to be sure, still not a person to be pitied as one without spiritual hope or an industrial future.

The Chicago Lighthouse at 3323 West Twenty-second street, conducted by the Improvement Association for Blind People and maintained by private initiative and voluntary subscriptions, is the only industrial training school for the adult blind in Illinois.

The factory employment department was opened at the Lighthouse in June, 1919, and Capt. Earl Douglas, recently returned from France, was engaged as factory instructor. Through the cooperation and courtesy of employers of labor, Captain Douglas has been able to obtain openings for the blind in various factories in Chicago, and the blind men are taught in the factories the very work at which they are to be employed. Blindness is considered a thirty per cent handicap, therefore the pros-

pective employee is given special training for his work from the point of view of time, motion, and fatigue study. Confidence is implanted in the blind man by the factory instructor as he works with him, and gradually his self reliance is built up. The instructor keeps in touch with the men through occasional visits, and when need for additional instruction develops he is able to continue the training so that the blind employee may not be limited to any one kind of work. Following this method, the Lighthouse has drilled blind men and women to take their places in the industrial army and to hold factory positions in fair competition with sighted workmen. Industrial work will place between \$12,000 and \$15,000 in the hands of the blind in Chicago this year.

Blind men have been placed by the Lighthouse in the following employments: sandpapering, polishing, and wrapping furniture; assisting core makers in foundries; assembling ringers on telephones; filing operations; tapping ball joints; tuning pianos; folding paper boxes; picking rubber from canvas tire patches; sorting copper from asbestos waste; assembling commutators for motors; filing regulating discs on automatic telephone dies; assembling phonograph arms; packing electric curling irons and other small articles. Since June, 1919, men and



The Chicago Lighthouse teaches women weaving on hand looms. The women memorize the patterns or read them in Braille, the sighted instructor selects the colors, and the weavers can then go on alone, with occasional supervision. Silk and linen textiles are woven in marvelously intricate designs. (International Film Service.)



Blind man sorting scraps of rubber at the United States Rubber Company, Chicago. The Chicago Lighthouse teaches a new employment to the blind man so that he may become self-supporting. (International Film Service.)

women have been placed in industrial positions and trained to do definite operations in the following Chicago factories: Automatic Electric Company, Balkwill & Patch Furniture Company, Barnhart Bros. & Spindler, Brunswick-Balke-Collender Company, Cable Piano Company, Edison Electric Appliance Company, Harvard Electric Company, Illinois Moulding Company, Johnson Chair Company, Karpen Furniture Company, C. J. Lawrence & Bro. Paper Box Company, Victor Gasket Company, Western Foundry Company.

The kind of factory operation listed above is not suitable for all types of blind people who seek to become self-supporting through Lighthouse activities. For blind people who are capable of learning the trade of reed worker a shop is maintained at the training school at the Lighthouse. The pupils must have a certain deftness of fingers, a love of the craft, and a willingness to give several months to learning the trade. The Lighthouse pays a flat wage during the training period, and graduates, at the end of their instruction, are accepted



Blind man learning massage under the direction of Dr. Peter J. Peel, at the Chicago Lighthouse. Through the cooperation of Dr. Peel, eight blind men and women have learned to give massage, at the Lighthouse. (Photo by Koehne, Chicago.)

at the Garrett Go-Cart factory as regular employees. The product of the Lighthouse work shop goes to the Garrett factory which makes go-carts and baby wardrobes. Seventeen men have been trained in reed work at the Lighthouse and sent to the Garrett factory during 1919. Thirteen men and eleven women are now being trained for the Garrett Factory and will receive the same pay as do the sighted employees.

Women Weave Textiles on Hand Looms

For women who need merely a supplemental wage, the Lighthouse teaches weaving on hand looms. The women memorize the patterns or write them in Braille and once the choice of colors is determined by the sighted instructor the weaver can carry on alone, with occasional supervision. Silk and linen textiles are woven in marvelously intricate designs which are a far cry from the old time rag rugs woven by the blind. The product is absorbed by the Highland Park Community Shop and through orders which are sent direct to the weaving shop.

Through the cooperation of Dr. Peter J. Peel, eight blind men and women have been taught how to give massage.

The Chicago Lighthouse has proved to the satisfaction of its board of directors that the blind beggar must give place to the intelligent, normal workman, handicapped but unafraid, because his other senses have been trained to offset his sightlessness.

NEW BOOK ON MEDICAL RECORDS SYSTEM IN THE HOSPITAL

Dr. T. R. Ponton, director of Medical Records, Vancouver General Hospital, for some time has been working on a publication which covers the system of obtaining and preserving medical records in hospitals, according to the system worked out in the Vancouver General Hospital. There have been so many demands for the medical record forms used in this hospital that Dr. Ponton feels that there is need for such a publication. The book will

contain a complete description of the entire system, the forms used for medical records, and a full discussion of how to overcome the difficulties encountered. The book, which will probably appear some time in February, will be of interest to all hospital administrators.

THE GROUP PRACTICE PROBLEM

By OTTO V. HUFFMAN, M.D., Dean, Long Island College Hospital, Brooklyn, N. Y.

During the past twenty years there has been growing in the minds of many physicians a vague idea that the practice of medicine could be conducted more efficiently and with less inconvenience to both the patient and the physician if a group of specialists practised as a unit; that is, if the members of the group had offices together and made available their services as needed in attending calls or in caring for patients in the hospital. The idea has appealed to the busy general practitioner who often feels the need of the help of a specialist; it has appealed to the specialist—the surgeon, the internist, and so forth—who finds it necessary to refer patients to specialists in branches other than his own; lastly, it appeals to the common sense of all that it is better to have such a group with offices together. In the case of a hospital with a close staff, it certainly would be a great convenience to the hospital administration and to the patients to have the offices of the entire staff located close at hand, where all could be readily consulted.

In the larger cities where the hospitals are centrally located and are served by members of the staff only, there is nothing essentially new about the idea of group practice, because it is already in the hospital. Most dispensaries constitute group practice. Here the idea is taking form that the group should practice as a group in relation to their private patients outside; that, in the case of the hospital staff, it should have its offices in the hospital or near by for the convenience of all concerned; and that in the case of the dispensary staff, it should apply the same economy of time and energy in private practice that it does in the dispensary.

In the smaller cities where the hospitals are open to all physicians and surgeons or where they are not centrally located, the idea of group practice is confined largely to office arrangements. Here it should lessen overhead expenses and provide more extensive equipment. More extensive equipment makes it possible to give satisfaction in a wider variety of cases than before, because a physician alone is apt to have too meager an office equipment.

Group Practice As a Partnership

So much for the vague idea of group practice that is taking hold of part of the medical profession. With the large transient population in our big cities during recent years, there is a beginning demand for an institution to which a patient may apply for relief regardless of what his condition may be, and also that the institution take the responsibility of providing the "doctor" or the necessary "specialist." In other words, there is a body of busy men who, impatient of the delays of our old system, want a corporation to take hold of this matter and deal with it in an efficient and businesslike manner. Opposed to this new idea is not only well fixed custom and tradition, but laws in many states which forbid corporations to practice a profession. A group cannot practice as a corporation, nor can a corporation sell professional services. The service can be only personal. On account of this fundamental situation in regard to the law, the nearest

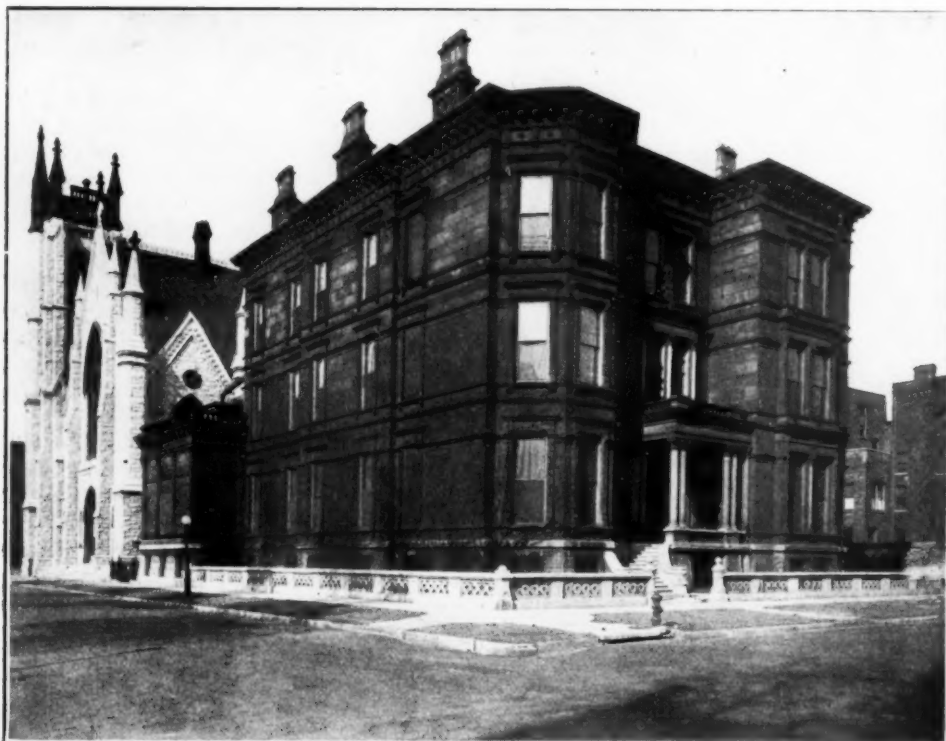
we can satisfy this demand for institutional responsibility is through a group practicing as a partnership. If a corporation could handle the problem, it would be a very easy matter to hire the necessary specialists on salary and to sell their services. In a partnership of several eminent physicians with large clienteles, it is easily possible to build up a group by paying salaries to the "lesser lights" because there is already a sufficient clientele to make a success of the group idea. But in the case of a group of young physicians who have not yet "arrived," I doubt very much whether they could make a success of the group idea in building up a practice. If they should omit having an internist and a general surgeon, they might succeed, since internists and surgeons would refer patients to them. This, however, would not be "group practice" because the group is not complete. Nevertheless, it would be an advance and a great convenience to all concerned.

demie and scientific institutions. Just as professors gave up the personal fee system in relation to their students, so could the doctors in relation to their patients. Both are forms of personal service.

NEW ADMINISTRATIVE HOME OF AMERICAN COLLEGE OF SURGEONS

The administrative home of the American College of Surgeons has been officially located in Chicago. At the twentieth meeting the Regents of the College accepted as a gift from Chicago citizens the building and site of one of the most dignified and costly residences of the city. The selection of Chicago as the headquarters of the college was determined by a vote of the Fellows of the college.

The location of the building on the corner of Cass and



South and west exposure of the new administrative home of the American College of Surgeons in Chicago, at Cass and Erie Streets, which was donated by patriotic citizens.

Group Should Be Paid Salaries

The real problem which group practice should attempt to solve is this: how to provide all the personnel and equipment necessary for the diagnosis and successful treatment of the various diseases, and to provide this for a common fee. The present system is at fault because patients of moderate means may have their money exhausted before they have gone the rounds among the specialists—not only losing money but time. It can be conceded that a group could be brought together to work on some equitable basis of dividing this common fee, but if it is to be divided in proportion to the time spent by each on the case we would still have the disadvantages of the present system. The only solution in my mind is that the group should command sufficient clientele in the start to make it possible to pay salaries. Each man in the group could put his whole heart into his work just as full-time professors and other instructors do in aca-

Erie streets is within walking distance of the loop district, which makes it of easy access to visiting surgeons.

In construction the building is fireproof and the Bedford stone of which it is built emphasizes its Elizabethan architecture. The interior is finished entirely of hardwood and marble, the central staircase being of marble. The residence was built by Mr. S. M. Nickerson, former president of the First National Bank, Chicago, and is probably the finest building used by any medical society in the world.

Chicago Citizens Cooperated

The citizens of Chicago who cooperated with the Fellows of the college in making the gift include: James A. Patten, Robert F. Carr, Charles H. Wacker, S. B. Chapin, Edward F. Swift, Frank G. Logan, Edward B. Butler, J. Ogden Armour, T. E. Donnelly, William V. Kelley, William Thorne, Julius Rosenwald, Edith R. Mc-

Cormick, C. H. McCormick, State Street Association, William Wrigley, Jr., William O. Goodman, Illinois Steel Company, Edward Hines Lumber Company, G. M. Reynolds, George E. Scott, Charles L. Hutchinson, Congress Hotel, Keith Spalding, R. T. Crane, Jr., M. A. Ryerson.

BETTER EYE, EAR, NOSE, AND THROAT SERVICE IN HOSPITALS

By FRANK ALLPORT, M.D., Chicago.

Favorable working hospital conditions inspire ambitious efforts and produce good results. This statement includes all departments, but especially ophthalmology and otology, where small procedures are particularly significant, and where minute post-operative infection frequently demolishes hopeful expectations. Some fortunate ophthalmologists work in ophthalmic institutions where necessary details are habitually performed, but most specialists work in general hospitals where their necessities are meagerly supplied. The writer recently enucleated an eyeball in a high grade hospital where the

with a congenial and disciplined staff, and with a familiar and well ordered armamentarium and surroundings.

Ophthalmic surgeons should be allowed a separate ward for their patients in order to do the most efficient work. This ward, even if small, may serve as eye and ear headquarters, where instruments, drugs, and appliances are prepared and kept, where orders are dispensed, and where patients are examined, treated, and dressed. Intelligent and delicate-fingered nurses should be installed, to remain on this service as long as possible. Adequate accommodations eliminate the loss of efficiency which constant passing from ward to ward, new nurses, and ever changing drugs, droppers, cotton, bandages, and other necessities entail.

A carefully selected head nurse or superintendent should be in charge of the eye, ear, nose, and throat department, in conjunction with head eye and ear intern, and a first junior nurse. This head nurse (graduate) should be paid a salary and live at the hospital, and, after being carefully instructed, allowed to develop in ability. The junior nurse will be so instructed that she



Lower entrance hall in the Nickerson mansion, which will form the medical hub of the world when the American College of Surgeons moves to its new quarters in Chicago.

anesthetist was a septic woman and the operative conditions were not even clean. The instruments supplied were an Allport mastoid retractor for a speculum, large abdominal forceps and scissors, and a sharp curved tenaculum for a strabismus hook. This hospital needs a magnification of vision concerning ophthalmology. Ophthalmic surgeons require mental concentration upon their delicate operations, and relief from care concerning such details as anesthetics, asepsis, instruments, and light. These conditions are only possible with familiar and well trained assistants, thoroughly acquainted with the operator and his desires. All instruments and appliances should be kept at the hospital and be constantly in order, so that the surgeon need not be compelled to transport his instrument from hospital to hospital. A surgeon's best work can be accomplished if performed in one hospital

can look after the ward and take the place of the superintendent, if necessary. The most suitable intern is one who is a graduate in medicine, intends to specialize in ophthalmology and otology, will stay at least one year, and who has already served a full term as a hospital intern, preferably in the same hospital. He should be given as much personal operative work (under instruction) as possible, so that he may become proficient and satisfied with his position. He will be assisted by a junior intern, trained to act as his substitute, should occasion arise.

It is desirable to have at least one day in the week as a kind of operative clinic day, where charity and semi-charity patients can be operated upon, and where visiting surgeons may pass a few interesting and instructive hours. Thursday afternoons have been thus utilized for years at St. Luke's Hospital, Chicago. At this hospital

there is a male ward of fifteen beds, with dining room, smoking room, lavatory, dressing, refraction, and treatment room. There are two day nurses and one night nurse. The female ward has four beds. The wards are always full to overflowing. Private room patients are always kept as much as possible on one floor. Upon the completion of the new hospital, all eye, ear, nose, and throat work will be done on one floor.

The question may be asked, how has this all been accomplished? The answers are as follows: first, by securing the interest and cooperation of Mr. Louis R. Curtis, the efficient vice president and superintendent; second, by maintaining absolute and undivided loyalty to the hospital, and by refusal to serve upon the staffs of other hospitals; third, by encouraging other reputable eye and ear surgeons to work at St. Luke's, thus magnifying the department and enhancing its importance and privileges; fourth, by being content with gradual growth, remembering that important evolutionary movements require time and patience.

RED CROSS PROVIDES MERRY CHRISTMAS FOR DOUGHBOY IN HOSPITAL

"Gee, I thought Santa Claus was all child's talk. But the Red Cross is the best little Santa in the world."

"Bud" Davis lay flat on his back in one of the general hospitals in the United States, and for the first time in months there was a contented smile on his face. He was still feeling the effects of that trip through the Argonne over a year ago. Close beside him hung a huge, white bag, the most conspicuous thing about it being the red cross on one side. It had been filled with gifts by some Red Cross workers who knew all about "Bud" and the hard fight he was making now.

It was the day after Christmas, and the big hospital had settled down again to its regular routine. But the memory of those extra "eats," the wonderful show, and the visits from various Red Cross women still lingered in the memory of doughboy and "gob," nurse and doctor, cook and corps man.

For a whole week the Christmas trees with their gay tinsel, candles, and bits of bright colored paper, were allowed to remain in the wards and convalescent houses as a reminder of the holiday season. It was the first Christmas many of the boys had spent in America for two years, and although they couldn't go home for it, the Red Cross managed to take to them something of the spirit of a good old-fashioned home Christmas.

In every hospital for service men—general, post, or base—a Christmas entertainment was planned. Sometimes it was a vaudeville show, a sing, a Christmas talk by some well known lecturer, or a concert—many of the hospitals had all of these things. At Camp Dix, N.J., a choir of sixty people from Philadelphia sang Christmas carols. Most of the big churches in Chicago volunteered the services of their choirs, while Judge Kenesaw M. Landis and other prominent men spoke at Fort Sheridan. The Chicago Athletic Association staged a boxing bout.

The gymnasium at Fort Sheridan, which was used for the Christmas party, was decorated in a forest effect. Two carloads of cedar trees were shipped from Green Bay, Wis., the Christmas tree land of the country. They were used on the walls and ceilings as well as standing upright, and were sprinkled with diamond dust and frost. As the boys entered, they might easily have imagined they were making a trip into a veritable Santa Claus land.

At the Great Lakes Naval Training Station, a Red Cross committee purchased small gifts for each patient

and nurse. A wonderful community spirit prevailed in Denver, showing the whole-souled cooperation of the Denver people who were still able to make the Red Cross the "Greatest Mother in the World" to the boys who had to be so far away from their homes.

Wherever possible, convalescent homes, gymnasiums, and auditoriums were used for the Christmas celebrations, but the "sick-a-bed" boys had their fun in the wards. In the Atlantic Division alone (which includes New York, New Jersey, and Connecticut), about 5,000 boys were given a Christmas celebration by the Red Cross.

At the Fox Hills Hospital, Staten Island, 1,400 wounded heroes had the time of their lives from Christmas eve until bedtime Christmas night. The day began with the singing of the carols and ended with a fireside talk. A lively crowd of doughboys in various stages of convalescence, and the nurses talked over their various Christmas experiences and "swapped" stories of overseas, while some of the more energetic popped corn.

The Red Cross was as much a part of the fighter's Christmas as it was of his life in France—as it will be until he no longer needs its services. To the thousands of sick doughboys who are still paying for the war, the Red Cross made the twenty-fifth day of December a merry Christmas.

TRAINING SCHOOL FOR SUPERINTENDENTS STARTED AT VANCOUVER HOSPITAL

With the modest enrollment of one student, the Vancouver General Hospital began on January 1, a course of training for hospital superintendents. This student is a physician who has returned from the Front and has a natural aptitude as an administrator. He comes back with a partially disabled arm, and the Canadian Federal Government has arranged to have the Vancouver General Hospital give him a complete course in hospital administration which will mean not only lectures and demonstrations, but also practice in the detailed administration of each department of the institution.

The course will extend over eight months, six of which will be spent in an intensive study of hospital administration in the Vancouver General Hospital, and the remaining two months in traveling through Canada and the United States, visiting the larger institutions and taking in whatever conventions may be in session.

REPORT OF NEW YORK HOSPITAL BUREAU OF STANDARDS AND SUPPLIES

The tenth annual report of the Executive Committee of the Hospital Bureau of Standards and Supplies of New York City for the year ending September 30, 1919, has just been issued.

During the past year the Reverend George T. Clover, superintendent of St. Luke's Hospital, New York City, has been serving as president, Dr. Thomas Howell, superintendent of the New York Hospital, New York City, as vice-president, and Mr. Reuben O'Brien, superintendent of Manhattan Eye, Ear, and Throat Hospital, New York City, as secretary and treasurer.

On February 4, 1919, Mr. W. J. Forbes, who has been acting as purchasing agent for the bureau during the past nine years, retired from active service on account of ill health. The growth and success of the bureau has been largely due to Mr. Forbes' indefatigable efforts and efficient administration. He has been appointed consulting purchasing agent, and Mr. Philip Cross purchasing agent in his place.

The report is devoted largely to a discussion of agreements and supplements, special quotations, the treasurer's statement, and the organization agreement and by-laws of the bureau.

HEALTH PROBLEMS AMONG WEALTHY RURAL POPULATIONS

By ESTHER E. WICK, R.N., Field Nurse, Southwestern Minnesota Sanatorium, Worthington, Minn.

At first glance, this title may seem anomalous and inconsistent to the uninterested reader. To public health workers in the great agricultural sections of the Middle West and elsewhere, this problem will be recognized as a very real one.

In years past we have been wont to look upon undernourished children and neglected health conditions as unavoidable results of poverty. When we have seen poor, little, white-faced, round-shouldered children, we have deplored the fact that in a country full of food and great wealth such as ours, any child should not have enough to eat or should have to work so hard that he grows old before he reaches his teens. But we have always associated these conditions with actual need and the poor food and housing conditions of the cities.

It may be rather startling, then, to learn that as a result of health surveys of the schools, it has been proved that the rural school children of even the richest agricultural sections are less healthy and are handicapped by more physical defects than the children of the cities, including the poorest districts. This is true in spite of the widespread notion that country living is a panacea for all the ills of human beings.

Thus in school health surveys in different parts of the country, the percentage of physical defects runs relatively as follows:

City children (middle class and wealthy)	35% to 50%
City children (poor)	60% to 75%
Rural children	70% to 90%

Malnutrition, faulty general physical aspect, and incorrect posture are included in these figures. The wide range in percentages depends on whether the survey is an initial effort or whether health supervision has been in force for some years. The rural figures are taken from various counties in Minnesota.

Of course the city children of the poor would be much worse off were it not for the health supervision of schools by physicians and nurses, the accessibility of dispensaries and dental clinics, home visits in cases of illness, and the serving of milk and lunches to under-fed youngsters in school; and last but not least, the more or less effective instruction in the principles of hygiene and sanitation.

Cause of Physical Defects

By comparison, the opposite condition is responsible for the poor record of the rural school. There has been no regular health supervision in the past; there are no dispensaries or clinics near enough to be of any value. There is little or at best half-hearted instruction in hygiene by untrained teachers, and that little is given in an uninteresting way. Often the teacher herself does not dare to enforce rules of personal cleanliness, fearing the displeasure of the community.

Instead of being properly nourished, which could easily be accomplished with the materials at hand, the child is starved, not because he lacks food but because he is allowed to choke his system with indigestible stuff which he cannot assimilate. He is drugged with coffee, while nourishing milk and buttermilk is thrown to the hogs.

"But why should this be so?" asks someone whose experience has not encountered these conditions. "And being true, it should be easy to remedy these wrongs where there is no lack of money."

Did you ever try to tell a man who drives to town in a five thousand dollar automobile that he is not taking proper care of his family; and likewise one who cheerfully pays three or four or five thousand dollars for an addition to his herd of blooded cattle, or one whose registered hog sales equal in amount the salary of the president of the United States?

You did not and it probably would do little good if you did. Of course, cases are seldom so extreme but they do occur. Here is an example as encountered by the writer: in a rural school a nurse made an initial survey, examining every pupil for ordinary defects. A boy of fifteen was found with symptoms of tuberculosis, his teeth were decayed, his gums inflamed, and his tonsils discharging pus. He was mentally retarded and hardly able to walk the mile and a half to and from school. The nurse arranged for a clinic and the boy was thoroughly examined by a physician. He was found to have moderately advanced tuberculosis in addition to his other defects. A home visit was made by the nurse to urge immediate treatment, and the advantages of sending the boy to a nearby county sanatorium were pointed out. She explained his condition, his chances of recovery if given systematic treatment at once, and the chances against him if not cared for. The wealthy farmer in question admitted that his son never had had any ambition but attributed this to "his darned laziness." He had no money to spend for foolishness, he said, and he was not going to bring up a boy of his to lie abed pretending he was sick so long as he was able to be up. This man had just sold his two hundred acre farm at two hundred and fifty dollars an acre and was retiring from farming.

The chief reason for the "problem" among the wealthy farmers is that they still regard health conservation as a fad to give "busy-bodies" and "fixers" something to do.

Years ago the successful farmer "went in" for scientific feeding of the stock, for scientific fertilization of the soil, and for all the newer methods of farming. He is anxious to learn improved methods and proudly exhibits the results of his efforts at state and county fairs. He takes the best farm journals, consults the agricultural experts employed as county agents, and attends Farmers' Institutes whenever he has a chance.

How about this same farmer's children? Oh, that is nonsense. Children are born, grow up, or die as the case may be. If they live, he takes a certain pride in the fact. If they die, no matter how unnecessarily, he assumes it to be the Lord's will and thus shifts his responsibility. If he raised his stock and his grain on the same principle that he applies to his children, we would not need to worry about the wealthy farmer for there would be none.

It is all right for the ten-year-old to come to a breakfast of fried potatoes, griddle cakes, doughnuts, and coffee—and oh, the coffee they do drink! Then trudge a mile or so to an unventilated school house, probably crowded besides, and eat a cold, if not actually frozen, lunch at noon; then home at night to a heavy meal consisting of fried meat or pork, beans, potatoes, pie, and more coffee; then to bed in a room with three or four others and the windows nailed down tight.

This routine and these menus are not imagined; they are based on the replies of pupils to our queries regarding their diet and living conditions.

Besides the improper feeding, the teeth probably are

decayed or abscessed, causing suffering and poisoning of the body. Perhaps the nose is stuffed up with adenoids, causing mouth-breathing and deformed jaws; or enlarged and infected tonsils may be responsible for the frequent colds and other illness and inability to satisfactorily recover. Often a child has frequent headaches, is irritable, nervous, and backward in school simply because an easily remedied vision defect is present. No wonder these children are pale and undernourished, with the serious look of age upon their faces.

The same symptoms in a valuable animal would send the owner "hot-footing" to the veterinary. Since it is only his child, he lets him drag through the years until the child either succumbs or becomes one of the millions that belong to the same class as those rejected for military service as "physically unfit."

Well, then, what is the remedy? Oh, it is simple, very simple. But it should have been applied thirty years ago. Education is the answer,—a broad, practical, applicable education in all health and sanitation matters.

Public health instruction and supervision must be popularized. Individual health instruction must be given to the child, and through the child the parents will be reached, to a certain extent. This health instruction should be placed on the same basis as other school subjects in the curriculum. If Jimmie's grades were affected by his failure to observe the rules of personal hygiene, would not he or his parents see that he kept reasonably clean?

The study of hygiene and sanitation, personal hygiene, preventive measures against infectious disease, and the food needs of the body should be taught and given credit in school as well as manual training and arithmetic. Only through the school will we succeed in building a foundation for a healthy citizenry of the future. Good health is the cornerstone for the house of happiness and prosperity.

Convenient rural health centers where the best in medical attention can be secured should be the next step in public health progress. When the rural resident knows that his child will secure as competent attention as his city brother, he will not be so reluctant to have Johnny's adenoids and infected tonsils out.

The term "public health" is misleading. To the average individual any subject with that "public" tacked on before it, means something that refers to all the other fellows but not to himself. The wealthy farmer, as well as everybody else, must be aroused to consider public health from a personal viewpoint.

The farmer of today is a shrewd business man. If you don't believe that, try to get the best of him in a business deal. The stories of the sale of the Federal building in Chicago to a farmer for the sum of one hundred dollars, are not at all representative of the average farmer's business acumen. He is conservative but keen.

Prove to him that good health is good business and like business, requires careful thought and study of the conditions which govern it. When he realizes this, he will demand the measures that will secure to him and his family the best possible health, which is really the definition of "public health."

Ill health is costly to the individual, to the community, and to the nation. Good health is essential to happiness, to efficiency, and to good citizenship. It is procurable in nearly every instance through attention to the details in living. When these things are brought clearly before the rural producer of the essentials of life, will he be unconcerned? I think not.

He will demand health instruction and supervision of

the schools as his privilege and right as a citizen. He will see that his community club secures health experts from time to time to lecture on prevention of disease and allied subjects, and he will attend these lectures as he now does those pertaining to successful farming. He will do this when he realizes that good health is the greatest asset in his possession and that to permit unnecessary ill-health in his family, is a sure way to allow the liabilities to pile up.

HEALTH MOBILE TEACHES HYGIENE

In a popular campaign which carries health education to the doorsteps of the people of Westchester County, N. Y., the Westchester County Chapter of the American Red Cross is teaching the health ideals of the Red Cross



The Westchester County, N. Y., "health mobile" is a picturesque feature of the campaign of health education being carried on by the Red Cross.

peace program in all the towns and rural districts in its territory.

The Westchester County "health mobile" is a picturesque feature of the campaign. One of the ambulances belonging to the chapter has been converted into a combination lecture platform and exhibition booth, and equipped with a complete Child Welfare Station. In this conveyance the chapter workers are touring the highways and byways of Westchester County, giving lectures and demonstrations.

Sometimes the exhibits are given in a vacant store, sometimes in the town hall or a parish house. In country districts, the exhibition, with its practical demonstration of scientific care of the baby, is given from the machine, with a group of mothers and children standing around the roadside. In places where there are public health nurses employed, the exhibit is placed under the direct supervision of these local nurses, and the country and state nurses act as assistants.

Child welfare is the chief object of the campaign, and besides educating the mothers in the scientific care of their children, young girls between the ages of eight and fourteen are being organized into a "Little Mothers' League," its members being taught to take expert care of the babies. Another feature of the campaign is the display of moving pictures on health topics, which always draws a large audience. The local health officer is usually the speaker while the "movies" which illustrate his talk are being shown.

MEETINGS, CONVENTIONS AND CONFERENCES

ORGANIZE HOSPITAL ASSOCIATION IN MICHIGAN

A call for a Michigan Hospital Conference to be held in Lansing, December 12 and 13, 1919, was issued by a committee of Detroit hospital superintendents. The letter follows:

Dear Sir or Madam:

A conference of Michigan Hospitals will be held in Lansing in the Senate Chamber on December 12 and 13, 1919.

This conference is called for the purpose of organizing a permanent Michigan Hospital Conference, and for the discussion of several subjects of pressing importance to the hospitals of the state. The following subjects will be presented and discussed:

1. The relation of state health insurance laws to general hospitals.
2. Legislation and training for junior nurses or nurse attendants.
3. The shortage of pupil nurses in hospital training schools.
4. Standardization of hospital compensation insurance charges.
5. Organization and training of hospital intern staff.
6. Use and training of nurse anesthetists.

Other timely subjects will be introduced if opportunity permits.

The first session will convene at 2:00 p. m. on Friday, December 12.

You are urgently requested to plan attendance at this meeting which may be of great importance to the general hospitals of the state.

Be sure to interest your trustees in this conference and have them authorize your attendance as a representative of your hospital. Hotel reservations should be made early. The two principal hotels are The Downey House and Kerns Hotel.

The letter was signed by W. L. Babcock, M.D., superintendent, Grace Hospital; Stewart Hamilton, M.D., superintendent, Harper Hospital; George E. Phillips, superintendent, Herman Kiefer Hospital; T. K. Gruber, M.D., superintendent, Michigan Mutual Hospital; Annie M. Coleman, R.N., Training School Inspector, Lansing, Mich., and William Bailey, M.D., superintendent, Receiving Hospital, Detroit.

The program as outlined above was carried out, the meetings being held in the Senate Chamber of the State Capitol. There were over seventy delegates in attendance, representing the various hospitals of the state. Detroit, Ann Arbor, and Lansing were represented nearly one hundred per cent.

A constitution with by-laws was adopted, modeled, to some extent, after the constitution and by-laws of the Ohio State Association. The membership qualifications were modified, however, to include institutional membership. The following permanent officers for 1920 were elected: president, Dr. Warren L. Babcock, superintendent, Grace Hospital, Detroit; vice-presidents, Father

Michael P. Bourke, superintendent, Catholic Hospital, Diocese of Detroit and Grand Rapids, Ann Arbor; Miss Anna M. Schill, superintendent, Hurley Hospital, Flint; Dr. E. H. Campbell, superintendent, Upper Peninsula Hospital, Newberry; secretary, Mr. D. W. Springer, superintendent, University Homeopathic Hospital, Ann Arbor; treasurer, Dr. Herman Ostrander, superintendent, State Hospital, Kalamazoo; trustees (to serve three years), Dr. Stewart Hamilton, superintendent, Harper Hospital, Detroit; Mrs. Dudley Waters, member of board, Blodgett Hospital, Grand Rapids; trustees (to serve two years), Dr. Christopher G. Parnall, superintendent, University Hospital, Ann Arbor; Mrs. Harry B. Joy, member of board, Woman's Hospital, Detroit; trustees (to serve one year), Dr. J. H. Burley, superintendent, Burley Hospital, Almont; Miss Grace D. McElderry, superintendent, Hackley Hospital, Muskegon.

The discussion on the shortage of pupil nurses in training schools resulted in the presentation of a resolution which was unanimously adopted before the close of the conference. This resolution placed the association on record as definitely in favor of the following:

(a) The prompt appointment of a standing committee with power to act in inaugurating a publicity campaign in the interest of the training schools of the state, expense incurred to be borne by this association and prorated in the several communities by the committee.

(b) Recommendation that the State Board of Registration for Nurses allow a definite number of months' credit for pupils presenting college and high school certificates.

(c) Approval of the eight-hour schedule for pupil nurses in training.

(d) Recommending the utilization of existing agencies and authorizing the appointment of a committee to promote the cooperation of the Red Cross nursing service with the Visiting Nurses' Association, the Infant Welfare Nursing Service, and other recognized bodies, to develop such groups of household helpers in the several counties of the states.

Arrangements were made for the next meeting to be held in Detroit, in June, 1920, and provision was made to meet biannually in June and December. The permanent organization was named "The Michigan Hospital Association."

A Case Difficult to Diagnose

A clerk in a dispensary asked a young man who came in what was the matter with him. He replied, "Vel, yesterday, I vas seek from the *inside out*, but today I am seek from the *outside in*." Rather a difficult case to diagnose, but the clerk, who had been at the desk for nearly twenty years, was equal to it. He found out that the patient had had a big boil the day before which made him sick from the *inside*. It had been lanced; therefore, he was now sick from the *outside*.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Secretary, New York State Board of Nurse Examiners,
135 E. 45th Street, New York City

RECONSTRUCTION OF HOSPITALS FROM THE NURSING STANDPOINT

By ELIZABETH A. GREENER, R.N., Superintendent of Nurses,
Mt. Sinai Hospital, New York.*

On every side and from every source we hear of the problems of reconstruction and readjustment which hospitals and training schools face today. So general is discussion of this subject that one is reminded of a well known comment attributed to Mark Twain to the effect that "much is being said about the weather, but very little is being done." We are prolific in discussion, but slow to act and to initiate radical changes.

What is the matter with our training schools? We all state in our circulars, and presumably we all believe, that splendid and unusual opportunities are afforded in the field of nursing to the intelligent, cultured woman who wishes to prepare herself for a life work which is well worth while from the standpoint of personal satisfaction and service. Why is it, then, that training schools offering the opportunity of preparation for such work with little or no personal expense to the student are not filled to overflowing with the very best type of woman that the country can produce? On the contrary, from every side we hear of the constantly decreasing number of desirable and suitable applicants.

Another grave cause for concern and anxiety to those vitally interested in nursing education is the criticism that after three years supposedly spent in actual preparation and training for such work the graduates of our schools as a whole are not adequately prepared to go ahead with the important work which awaits them. Especially is this true, we are told, in Public Health work or work along executive or administrative lines.

So serious has become adverse criticism concerning the inadequacy of the present method of training nurses that, in the opinion of many of our best thinkers, the whole structure of nursing education is in danger of collapse unless radical changes are introduced, and introduced soon.

Conditions throughout the entire world have changed during the past few years as a result of the world's upheaval during the recent war. Hospitals and training schools need to keep pace with the demands of the day, although to many of us actively engaged in training school work it seems as if the necessary changes were never more difficult to accomplish than at the present.

One of our greatest difficulties is that produced by the shortage of applicants. In every part of the country hospital beds are rapidly increasing in numbers; new hospitals are being built and opened for the use of the public, each imbued with the definite desire to establish

its own school of nursing; and within established hospitals each year more actual nursing service is being required in all departments. Without considering any increase in the number of hospital beds, it is probably safe to estimate that during the last four or five years there has been an increase of from ten to twenty-five per cent in the amount of nursing work which must or should be performed by nurses, not only in the hospital proper but also in its special departments, such as the dispensary, social service, x-ray, and physical therapy.

Any program of expansion, development, and progress in the training school necessitates a marked increase in the annual expenditures of the hospital, and, unfortunately, hospitals are already facing greatly increased financial burdens without any immediate prospect of proportionate increase in their income.

Because of the fact that the work of the hospital is humanitarian as well as educational in character, the physical welfare and nursing care of sick patients cannot be sacrificed, not even to the education of the nurse; on the other hand, neither can the education and physical fitness of our young student nurses be sacrificed to the needs of the hospital. Some of the most serious problems, then, that seem to be demanding solution are:

Problems Demanding Solution

(1) What immediate steps shall be taken to improve conditions and methods of training so that our schools will attract student nurses of the right type in sufficient numbers?

(2) How shall the hospital give adequate nursing care to its patients and at the same time make provision for the proper education of its student nurses?

(3) Who shall decide what plan of reorganization is best for the training school of today? How can such changes be enforced and regulated?

(4) Since in the last analysis the proper expansion of nursing education necessitates greatly increased expenditures on the part of the hospital, how shall sufficient funds be secured for such purpose?

Answering question number one, as to what steps should be taken to improve conditions and methods of training in order to attract student nurses of the right type in sufficient numbers, first and most important is the shortening of the long hours of duty of the student nurse. Fortunately hospitals throughout the country are practically unanimous in recognizing the justice and desirability of this change, and in most cases they are working toward this end with the hope of solving at least this problem during the coming year.

Changes should be made in our methods of training so that a three-year course of training shall be more distinctly educational and sufficiently broad in scope to pre-

*Read at the Eighteenth Annual Meeting of the New York State Nurses' Association, Brooklyn, Oct. 21-23, 1919.

pare nurses to enter the executive hospital field or the field of Public Health Nursing. We are doubtless all agreed that our student nurses should not find it necessary to spend more than three years in acquiring such training. Many of us are asking ourselves whether, in order to give a complete training and also to meet the argument so frequently advanced that nurses, like medical students, should all be trained along the same general lines, it might not be desirable to institute a two year and a three or four months' course of training along carefully arranged general lines; this course to be taken by every student entering the school, with the regular school diploma awarded at the end of the course, provision being made for immediate continuation of the work in a highly specialized postgraduate course of elective work covering an eight months' period for students desiring to prepare themselves for special work. Students intending to do private duty nursing might not desire to take this extra course; undoubtedly all others would.

Should this change be made we would not be doing what many of us are attempting to do today, when we give from three to six months' specialized work to every student in the school, regardless of her ability or fitness for such service or of her expectation or desire to ever make use of such special training. The work which is at present considered as special or elective and which is scattered at intervals through a three-year course of training might be grouped in this postgraduate course and the preliminary training required in Public Health or for preparation along executive or special lines, could thus be given.

It is a question whether hospitals might not really profit rather than lose by this apparent reduction of time, as it is a certainty that the more ambitious and desirable type of student would generally elect to continue the last eight months' work in order to secure the extra training and the postgraduate certificate which would carry considerable prestige with it.

We must face the fact that large numbers of the young women entering our schools today are doing so for the sole purpose of being prepared for Social Welfare or Public Health work and it is as unjust to deprive them of the opportunity of preparation for this work as it would be to deprive them of the opportunity of obstetrical or operating room training. The plan of establishing schools on this general basis also suggests the idea that hospitals with special facilities and equipment for elective postgraduate work of value might afford the opportunity of affiliation with smaller, carefully selected schools where such work is not possible. This would afford students from smaller schools the greatly needed opportunity of preparation for special elective work.

The idea of introducing a shortened period of training in addition to an eight hour day seems a startling one at first sight, but might not such changes help us to solve the problem of the shortage of applicants and, at the same time, make it possible to prepare a larger number of nurses for the needs of the public in a shorter period of time? It would certainly help us to maintain standards which promise to be utterly demolished if a general course of training of one year or less for nurses, attendants, or any other group becomes an established practice without adequate safeguards as to licensing or supervision of training. If the nursing profession does not boldly face the many complex nursing problems which today confront us and if we do not point out logical and satisfactory methods by which such problems may be solved, we may rest assured that others can and will undertake this piece of work for us.

Hospitals and training schools of the country, more-

over, should spare no effort to endorse and participate in the work of publicity concerning nursing education, the necessity for which is being so strongly agitated through the national nursing organization. The simple statement made in a paper presented by Miss Carolyn E. Gray at the meeting of the National League of Nurses held in Chicago last June, to the effect that 15,000 students and possibly more are needed for annual enrollment in order to keep up the ranks of the training schools of the country, should be sufficient argument in this matter. Miss Gray's estimate is a most conservative one as it is a well known fact that not more than 60 or 65 per cent of all students enrolled for training complete the full course of three years. As the figure presented by Miss Gray of 15,000 students is based upon the number whom we expect to graduate annually from our training schools, her estimate is considerably too low.

Training schools throughout the entire country will undoubtedly be greatly benefited by the survey of all schools of nursing which has been recently undertaken by the American Nurses' Association and the American Red Cross for the purpose of standardization. This survey, if successful, should yield many interesting and significant facts and serve as a basis for many recommendations of greatly needed changes and improvements.

Increase Nursing Personnel

Our second problem is also of a most serious character. How shall hospitals be enabled to give adequate care to their sick patients and at the same time give to their student nurses a suitable and satisfactory nursing education and shorter hours?

The answer may be brief. First, by employing more graduate nurses on the permanent staff of the hospital, especially on the night force. Second, by the use of paid helpers or hospital maids, at least one of whom could be used to good advantage on every large hospital ward. Third, and I purposely place this suggestion last, by the use of graduate attendants who have been trained in institutions registered for that purpose and controlled by state law. Until legislation for the control and regulation of this group has been enacted, training schools and hospitals will find the use of attendants a dangerous procedure and one apt to work out more harm than good ultimately. Any attempt to train student nurses and attendants in the same institution must be regarded not only as undesirable but as apt to result in danger and disaster to the training school itself.

Organization of Training School

Problem three—who shall decide what plan of organization is best for the training school of today and how shall such changes be regulated and enforced?

The newly organized American Conference on Hospital Service which has come into existence during the past year affords an opportunity for the development of a comprehensive program for the nation, through the combined thought and effort of medical, lay, and nursing groups each of whom has hitherto considered the problem independently.

It is but natural that nurses in dealing with this problem should emphasize nursing standards, the details of nursing education, and the professional status of nurses. In considering nursing problems from these several points of view nurses have never felt that they were acting selfishly, but have believed that the control of nursing education and the protection of the rights of the nurse, both as undergraduate and as graduate, are of vital concern to the public.

The physician's point of view has been somewhat different. At the bedside the nurse is the physician's assistant and he is therefore interested primarily in obtaining an unlimited supply of faithful assistants ready to perform such tasks as may be assigned to them. With the demand for the services of nurses in fields apart from bedside nursing, physicians have not been particularly concerned. Taking what they evidently believed to be their patients' viewpoint, they have generally looked askance at any tendency toward the raising of nursing standards which was likely to be accompanied by an increase in the cost of nursing service. With but few exceptions physicians have concerned themselves but little with methods of teaching and have had little sympathy with legislation designed to protect the nurse as well as the public from imposition and fraud. The physician has evidently felt that he was fully qualified to protect his patients by the exercise of his personal judgment in the selection of nurses and bedside attendants; that legislative standards were superfluous; and that the activities of nursing organizations which have promoted protective legislation were more or less pernicious.

Hospital trustees have been torn between conflicting desires. They have felt it to be their duty to train large numbers of nurses in order to satisfy the public demand; and in seeking to enroll large numbers of probationers in the hospital schools they have undoubtedly been influenced also by the hospital's own nursing needs. Compelled by financial necessity, they have at times opposed what nurses have regarded as just demands for improvement in working conditions; and, without claiming to be expert in matters of nursing education, they have nevertheless demanded that they be recognized as the responsible managers of training schools.

Lack of Unity

And so, during the past decade, there have been two and sometimes three forces arrayed against each other in the struggle to readjust and improve nursing service in and out of hospitals. Opinions have clashed, but there has been no meeting of minds; the result has been confusion of thought and effectual interference with progress. Under these conditions, one looks forward eagerly to the effort, through the American Conference on Hospital Service, to debate the issue fairly and to develop a program which will come reasonably near to meeting all essential requirements.

In his public formulation of a program for the committee work of the conference at Cincinnati in September, the spokesman for the conference indicated what might reasonably be expected of a committee composed of nursing, professional, and lay elements, and publicly advised that in the deliberation of such a mixed committee, the representatives of the nursing profession be permitted to lead. I am advised that in the Executive Session of the Conference itself this view prevailed and that either the League of Nursing Education or the American Nurses' Association will be invited to assume the chairmanship of the committee which is to consider nursing matters on behalf of the conference, and which is expected to make its first report at Chicago, in March, 1920.

Might it not be wise to attempt to bring about the organization of similar mixed committees in each of the states? The appalling lack of unity of mind and purpose in New York state is surely a striking example of such a need. If the medical, nursing, and representative lay forces of the state could be prevailed upon to combine thought and effort and lay aside personal jealousies and

petty differences of opinion, there is nothing in the line of progress and advancement which would not be comparatively easy of accomplishment.

How to Secure Sufficient Funds

Question number four—since the proper expansion of nursing education calls for greatly increased expenditures on the part of the hospital, how shall sufficient funds be secured for this purpose? I know that many people would say with great emphasis "by special endowments for training schools." One must say in regard to such a plan that wherever it can be accomplished it is ideal. Unfortunately at the present moment many schools could not secure immediate endowments at all adequate to their needs. Therefore, it would appear that the only logical way in which to meet the increased expense of both hospital and training school is by community or municipal support in the same manner in which our public schools are maintained.

Until very recently hospitals and training schools throughout the country have struggled alone with the responsibility of the education and training of the nurse. It has taken years of education and a great war to awaken us to the fact that the health and welfare of the nation depends largely upon the attitude of the general public concerning medical and nursing education and control. A recent writer on this subject has said "not even our public school system is of any more importance to the future welfare of the country than is the organized work of Public Health Nursing. From the cradle to the grave our people take no important step in which they do not at once feel the importance of this group. We cannot soberly contemplate the huge health problems of the war and their future readjustments without trembling at the risk we run in not preparing to meet such needs."

The general public today is demanding that training schools shall graduate efficient and properly trained nurses capable of performing their important work in the nursing care and health education of the community. I quote from an editorial which appeared in the *New York Evening Sun*, October 17, 1919: "One of the biggest jobs undertaken by anybody in New York is that of the health nurse. She attempts to teach our citizens 'how to get the best kind of living conditions out of the circumstances that surround them.' Could the wisest men in the world do more?"

Surely it is not unreasonable for us to expect that a community which requires service of so broad and valuable a character from its graduates nurses be also sufficiently intelligent to realize that progress and development in our schools of nursing can only be assured when adequate financial support is obtained and when schools of nursing are granted the recognition afforded other educational organizations. Then, and not until then, will the training schools be enabled to give a dignified and suitable preparation to the young women of superior intelligence and ability who will only enroll for such work when many of our present obsolete methods are eliminated and when nursing education becomes an actuality and not merely a name.

HEALTH INSURANCE COMMISSION REPORT

The report of the Health Insurance Commission of Pennsylvania as presented to the legislature in January of last year is now in print. Each senator and representative is allotted a limited number of copies and copies may be obtained by the secretary of each county society.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR.
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NEW YORK DISPENSARIES

A Report Made by the Public Health Committee of the New York Committee of Medicine.

After a year's investigation and study, the Public Health Committee of the New York Academy of Medicine has issued a report of the dispensary situation in New York City. The magnitude of the dispensary field in New York City justified a thorough inquiry into the numerous medical, social, and economic problems involved, and the conclusions from this important study will be of great interest and value to all dispensary workers.

Three chapters of the study will be published in THE MODERN HOSPITAL because of their special interest to dispensary and hospital executives. They are entitled: "Organization, Administration, and Equipment of Dispensaries;" "Medical Organization," and "Book and Record Keeping."

The opening chapter, "Organization, Administration, and Equipment of Dispensaries," will be presented in two parts—Part I, immediately following, and Part II, in the March issue. Part II will include a discussion of "Existing Practice in the Management of Dispensaries, With Reference to: (4) Dispensary Hours; (5) Prevention of Over-Crowding and Long Waiting Periods; (6) Exclusion of Contagious Disease Cases; (7) Surgical Operations and Facilities for the Care of Patients."

ORGANIZATION, ADMINISTRATION AND EQUIPMENT OF DISPENSARIES

Part I

Section I—Policy and Management

In the study of organization and administration, the two fundamental inquiries relate to the responsibility, first, for the policy and supervision of the institution; and second, for the enforcement of the policy and supervision.

(a) *Existing Practice with Regard to Responsibility for: (1) Policy of Institutions.*—With regard to administrative supervision of dispensary work, boards have little in common, and hence there is considerable difficulty in

classifying them. Two principal groups are, however, rather clearly defined: (a) boards of trustees, directors, managers or governors, the members of which are not engaged in the professional work of the dispensary; and (b) boards of trustees, directors, managers, or governors which include in their membership physicians who are also members of the medical or surgical board or staff.

The majority of dispensaries included in this study belong to the first group. Typical examples of such institutions are the New York Hospital Dispensary, the St. Luke's Hospital Dispensary, the Presbyterian Hospital Dispensary, and the dispensaries of the Bellevue and Allied Hospitals. Exam-

ples of the second group are the Post-Graduate Hospital Dispensary, the board of directors of which includes a large number of physicians, members of the medical staff of the institution; the New York Eye and Ear Infirmary Dispensary, the board of directors of which includes three representatives of the board of surgeons; and the Knapp Eye Clinic, the medical director of which is a member of the board of trustees.

Only in some of the institutions is the responsibility for supervision of the work of the dispensary vested in a body specially constituted for the purpose. In a major-

ity of the institutions, reports of the dispensary work go through various channels, either the superintendent, the medical board, or the college faculty, if the dispensary is associated with a medical school.

In Mount Sinai Hospital and the Presbyterian Hospital, special committees on dispensary service of the general administrative boards supervise dispensary work and receive communications relating thereto from the medical staff. At the Demilt Dispensary there is a dispensary visiting committee of the administrative board, which changes monthly. At the Polhemus Clinic (Long Island College Hospital Dispensary) there is a special board of directors of the dispensary which is independent of the board of regents of the hospital and medical school with regard to its membership, but under the general direction of such board of regents.

In other dispensaries the administrative board is represented by an executive committee which is responsible

OUTLINE OF ORGANIZATION, ADMINISTRATION, AND EQUIPMENT OF DISPENSARIES

1. *Policy and Management:*
 - (a) *Existing practice with regard to responsibility for:*
 - (1) *Policy of institutions.*
 - (2) *Enforcement of policies.*
 - (b) *Existing practice in the management of dispensaries with reference to:*
 - (1) *Admission fees and other charges.*
 - (2) *Assignment of patients to clinics.*
 - (3) *Utilization of the dispensary plant.*
 - (4) *Dispensary hours.*
 - (5) *Prevention of over-crowding and long waiting periods.*
 - (6) *Exclusion of contagious disease cases.*
 - (7) *Surgical operations and facilities for the care of patients.*

to the board for general, as well as for dispensary supervision, and deals directly with the chief officers of the medical staff.

In none of the dispensaries studied, however, was there found a general administrative organization providing for a dispensary committee which would be representative of all the various elements of dispensary organization—executive, administrative, medical, nursing, social service, and clinical.

Superintendent Has Executive Power

(2) *Enforcement of Policies.*—The directing or executive authority and responsibility for dispensary work in the hospital dispensary group is usually reposed in the superintendent of the hospital of which the dispensary is a part. The superintendent of the hospital is, however, ordinarily too much preoccupied with hospital duties to give much of his time to dispensary work and so he delegates part of his authority to some one else. Sometimes this is an assistant superintendent of the hospital, (Manhattan Maternity Hospital) sometimes a chief nurse (dispensaries of the Bellevue and Allied Hospitals group), sometimes physician-chiefs of clinic (Hospital for the Ruptured and Crippled), and sometimes the dispensary registrar (Polhemus Clinic).

In the dispensaries which are departments of medical schools, namely Cornell Dispensary and Vanderbilt Clinic, the lay business manager of the medical school is the responsible executive in the former, and the lay superintendent of Roosevelt Hospital in the latter.

In the dispensaries not affiliated with hospital or medical school, the executive may be a physician independent of routine clinic work (Demilt Dispensary) or regularly engaged in clinic work (Brooklyn City Dispensary and New York Clinic for Speech Defects) or a lay superintendent of dispensary (New York Dispensary).

Out-Patient Department Needs Executive

Just as there is a deficiency in the organization of the governing boards of many of the out-patient departments of hospitals with reference to the fixing of responsibility for supervision, so there is in many institutions an evident neglect to provide for the presence of a responsible executive at the out-patient department during the hours at which patients are admitted. The need of such an independent executive in a large out-patient department is apparent from observation of dispensary practice. Discourtesy to patients is by no means rare; controversies with patients are frequent and must be adjusted; delays of admission and treatment occur and hamper efficiency. These are matters which require the attention of an executive, not at long range from his office in a remote part of the building, but directly, in person, and immediately. When the dispensary is not in session, there are other important duties to be performed: to receive and examine the reports of various departments; to see that the dispensary is prepared for the next day's work; to check up the attendance at the dispensary and the reports of receipts, etc. An analysis of dispensary work at frequent intervals by the executive is necessary to prevent such work from becoming a deadly routine.

(b) *Existing Practice in the Management of Dispensaries with Reference to:* (1) *Admission Fees and Other Charges.*—Each dispensary of the group included in this study has seemingly adjusted its admission fees to meet its own peculiar needs and circumstances, with the exception of the Bellevue and Allied Hospital group, which, being public institutions, do not charge any fees. In the other dispen-

saries the widest possible variations are found. Six dispensaries require no registration fee, but charge for prescriptions, dressings, special treatment, etc. Three dispensaries require an initial registration fee—one of fifteen cents and two of twenty-five cents—and make no charge for subsequent admissions, but require fees for prescriptions, dressings, etc. One dispensary charges a registration fee of \$1 and also makes special charges for treatment. One dispensary leaves it to the patient to fix his own fee at each visit by "dropping something in the box." Twelve dispensaries charge an admission fee of ten cents at each visit, and three ask twenty-five cents at each visit.

Reasons for Variation in Fees

The reasons for this great variation in fees are to be found in the needs and experiences of the individual institutions. The experience of one dispensary in adjusting its fees to meet the needs of the dispensary with regard to attendance and at the same time to conform to the purse of the patients, illustrates the situation. This dispensary, which is not affiliated with a hospital, but conducted as a department of a medical school, required no fees at the outset. As a result, dispensary attendance grew beyond the capacity of the institution. An admission fee of ten cents was then charged to cut down attendance, but failed to have the desired result. The next step was to add special fees for dressings and prescriptions, bringing the total cost to the patient up to approximately twenty-five cents. This resulted in too great a loss of patronage, so the admission fee was eliminated entirely, and fees for prescriptions, dressings, and special treatment only were required, making the average cost to each patient about fifteen or twenty cents. This reduction of charges resulted in increasing the attendance to the desired point.

It would appear that the minimum fee for so-called "free" dispensary service, except in dispensaries furnishing a highly specialized service, such as the Neurological Institute which requires a registration fee of \$1, and a fee of twenty-five cents for subsequent special treatment, should be twenty-five cents for each admission. The maximum might perhaps be as high as fifty cents. A fee of twenty-five cents is required for each admission to the Brooklyn Hospital Dispensary, and little difficulty is experienced in collecting it. A fee of twenty-five to fifty cents for each admission should ensure for the patient, however, adequate facilities for diagnosis and treatment. The dispensary which is poorly equipped and otherwise unprepared to render service of high quality could not keep its patronage against the competition of other, better equipped dispensaries if such fees were charged, and this would hasten the elimination of unfit dispensaries or compel them to raise their standards.

Fees Should Be Standardized

The adoption of standards of equipment and service as worked out by the Associated Out-Patient Clinics should, however, result in standardization of fees in those institutions where standards of service are maintained. Provided the patient obtains satisfactory service, a minimum fee of twenty-five cents for each admission is not excessive. The cost of dispensary service has increased materially, and will no doubt steadily increase, to meet the generally higher cost of supplies and equipment and the demands of dispensary workers for better compensation. The falling off of dispensary attendance during the period of our participation in the war, noted in the majority of dispensaries included in this study, is attrib-

uted by many dispensary executives chiefly to the fact that there was less unemployment, owing to the necessities of war work. Former patients, foregoing dispensary treatment because of lack of time, employed private physicians as being more convenient. The generally higher level of wages which will probably be maintained warrants "free" dispensaries charging fees more nearly commensurate with the service rendered.

That there should be a fee goes without saying; that an initial registration fee of ten or fifteen cents, which carries with it the privilege of a year's dispensary treatment, is inadequate, may fairly be maintained; that a fee of twenty-five cents in dispensaries giving satisfactory service is not too high for a large percentage of patients and can be collected, has been demonstrated. It would be far better to charge, as the Brooklyn Hospital does, a fee of twenty-five cents for each admission, than to charge a low fee for admission and then attempt to raise the total charges to the patient by adding special prescription, dressing and treatment fees, as is done in many dispensaries. Provision should be made to remit the fee when the patient's economic condition calls for it.

The fees for prescriptions, dressings, and treatments vary widely. In some dispensaries a fee of five cents is charged if the prescription requires a bottle; in others, the charge for prescriptions is based on the cost of preparation. Treatment fees vary from ten to fifteen cents for surgical dressings to \$2.50 or more for salvarsan. Special charges are also made for operation, administration of anesthetic, and x-ray examination, varying from fifteen cents to \$3. There are no standards, and each institution bases its charges on what experience has shown to be advisable.

Charges Could Be Standardized

Charges for salvarsan, prescriptions, and the like could no doubt be standardized in those institutions having comparable standards of service. Prescriptions should be based upon cost, and this naturally will vary somewhat with each institution because of the variation in prescriptions as written by physicians, but each institution dispensing medicine should do so on the formulary basis because of the greater economy resulting in the purchase and preparation of drugs, an economy to the dispensary which may be made an economy to the patient, also. In the larger hospital dispensaries this is the prevailing practice, but as the formularies vary somewhat, there is corresponding variation in costs; but even in the preparation of dispensary formularies, it would be well to approach great uniformity in prescription writing and therefore greater uniformity in costs. Certain prescriptions for tonics, cough mixtures, laxatives, sedatives, or diuretics, which are standard, cheap, and in common use, could well be incorporated in a standard formulary for general dispensary use. The use of such a standard formulary would permit a number of dispensaries to club together in purchases of drugs and thereby obtain a better price; the use of stock preparations put up in convenient packages would save considerable time in dispensing drugs and in some dispensaries would permit a reduction of salary cost in the drug room; the use of printed prescription slips for the various standard preparations would save time for the physicians and simplify matters also for the pharmacists. All this saving could be passed along to the patient. The establishment of uniform fees would be easy for other charges, such as the administration of anesthesia, salvarsan, serums, or Wassermann tests.

There is a growing conviction in the minds of the majority of dispensary administrators that patients should pay more for dispensary service; that the time has come to place the responsibility upon the patient of meeting his medical needs. Provision against sickness should be as much a part of the individual's budget as provision for clothing, shoes, and other material needs.

(2) *Assignment of Patients to Clinics.*—Discussion of the clinic organization of dispensary service leads naturally to comment on existing practice of assignment of patients to clinics. Present practice in the dispensaries included in this study is based upon a preliminary selection and assignment of patients to the various clinics by the registration clerk, who makes inquiry as to the nature of the patient's illness and notes the apparent signs pointing to such illness. In only two of the dispensaries studied is the preliminary assignment made by a physician (Demilt and Brooklyn City Dispensaries) although in some of the others the long experience of the registrar in making "snap" diagnoses has made his work acceptable. In many dispensaries, however, the inadequate experience and lack of proper training of the lay registrar multiply the difficulties of prompt and efficient handling of patients. A patient incorrectly assigned to a clinic must later be transferred to another clinic. The time of physicians and others is wasted in getting this particular patient properly started on his dispensary career, and in a large dispensary handling several hundred patients daily this means considerable loss of time and waste of motion.

Trained Physician as Registrar

The appointment of a well trained physician as registrar with adequate salary, theoretically should be effective in reducing to a minimum errors in assignment of patients to clinics; but it is difficult to secure a trained physician, even at a high salary, who would be willing to perform such routine service. The appointment of a young physician or intern to this position is also unsatisfactory because he has not had adequate experience in handling patients and is himself likely to fall into the rut of routine perfunctory "snap" diagnosis. It is obviously impossible to give the patient a satisfactory preliminary examination at the admission desk.

It is believed that a more satisfactory procedure would be to admit all *bona fide* patients except those whose disease or injury is apparent and readily classifiable, to a general medical clinic for complete preliminary examination and diagnosis before final assignment. The patient with a cough, who might under the present system be assigned to a throat clinic, a cardiac clinic, or a tuberculosis clinic on the "snap" determination of the registrar, could there be thoroughly examined and properly assigned, thus saving many transfers, perhaps, and loss of time to both physician and patient. Such a plan would require the services of a corps of medical examiners of skill and experience for the examination of new patients, which, with the proper organization of the medical service, could be easily recruited, especially if all of the clinic physicians could have a chance in rotation to serve in the diagnostic admission clinic.

(3) *Utilization of the Dispensary Plant.*—In appraising physical conditions in dispensaries, it is necessary to recognize at the outset that the hospital dispensaries have in many instances resulted from after-thought, rather than fore-thought. The hospitals naturally came first, and when it became apparent that the dispensaries were an essential feature of good hospital service, they were

established in the hospital plant wherever space could be found. The result has been too often that dispensaries which may in the beginning have been adequate in physical plant are now greatly handicapped by lack of space; dispensary needs and hospital needs have grown so rapidly that, in many instances, hospital plants can no longer house their dispensaries properly. It may be said of the institutions included in this study that, with but few exceptions, the dispensary plants are physically inadequate except where special dispensary buildings have been constructed, or the original plants extended.

Growth of Dispensary Services

The hospitals of the Bellevue and Allied group, with the exception of Gouverneur, where a new separate dispensary building has been built recently, afford excellent illustrations of the growth of dispensary services beyond the physical capacity of their original quarters. At Bellevue Hospital the dispensary occupies a two-story building which, although perhaps originally sufficient for the purpose, has been long since outgrown. At Harlem, it has been well-nigh impossible for the adjustment and readjustment of dispensary quarters to keep pace with the constantly growing population of the vicinity and the consequent evergrowing service of the institution. As a result, at this institution there is a congestion of patients and doctors, and a cramping of space, which make efficient and satisfactory work difficult. At Fordham Hospital the dispensary is in the basement, which is not well adapted to the dispensary service because of the lack of clinic room space in proper proportion to waiting room space. The needs of the Fordham Hospital district have already far outgrown the capacity of the hospital and dispensary.

At the New York Hospital, Roosevelt, Lincoln, Post-Graduate, the Demilt Dispensary, and the Neurological Institute, also, the demands for dispensary service have grown beyond the capacity of present quarters. Lack of adequate waiting room space at the Neurological Institute makes it necessary for patients to wait in long lines in the street. Poorly lighted and poorly arranged quarters in the basement of Roosevelt Hospital make efficient dispensary service well-nigh impossible; at the Demilt Dispensary, also, basement rooms are used which require artificial lighting at all times, and are generally unsatisfactory in arrangement; at the Lincoln Hospital, the hospital basement is also used for dispensary work, and the work is considerably hampered, both because of inadequate waiting room space and inadequate clinic room space; at New York Hospital, the demand for large waiting room space has made it necessary to economize the clinic room space, with resulting inconvenience to physicians.

Space Not Utilized

On the other hand, in many of the newer and better arranged dispensaries, there is an ample provision of clinic and waiting room space, which is not utilized to full capacity. This is particularly true at Gouverneur Dispensary, where, as stated above, an excellent three-story dispensary building has been built recently. At this dispensary, the first floor includes the admitting office, waiting room, and medical clinics, including clinic for children; the second floor is the surgical floor, and the third floor the tuberculosis floor, with space also for dental clinic and eye clinics. But general medical and pediatric clinics are held only in the morning, from ten to twelve, and general surgery from two to four p. m.; for a large part of the day, this fine dispensary plant stands idle.

At the Lebanon Hospital dispensary a very well

arranged dispensary building has been recently built, but the building is not adequately utilized, because clinics are held only from two to four p. m., except the pre-natal clinic on Wednesdays and Fridays from ten to twelve a. m. At the dispensary of the Hospital for the Ruptured and Crippled there is a very ample provision of clinic and waiting room space, which is, however, only utilized from one to three p. m. daily. At the New York Eye and Ear Infirmary and the Manhattan Eye, Ear, Nose, and Throat Hospital, where there are very satisfactory clinic arrangements and equipment, clinics are held only in the afternoon from one to three.

From even such limited study as the present one, it is apparent that New York City needs rather wider utilization of the dispensary plants which it now has than new dispensaries. It is true that the lack of wider use of the dispensary plant is dependent in large measure upon the difficulty of arranging convenient hours for an almost universally unpaid medical service. Whether or not this difficulty would be solved completely by the payment of salaries to physicians, or by the establishment of night pay clinics, remains to be seen. It seems reasonable to suppose that some, at least, of the difficulties would be solved by these measures. Certainly efficiency and economy of expenditure of public money for the Bellevue and Allied Hospitals warrants, not only more adequate provision for dispensaries in Bellevue, Harlem, and Fordham, but also a much wider utilization of the excellent dispensary plant at Gouverneur.

Summary of Physical Defects

Without further consideration of the relation of dispensary hours to the proper utilization of the dispensary plants, a brief summary of the more evident physical defects in dispensary plants will perhaps be helpful in suggesting practical remedies:

- (i) Inadequately lighted, usually artificially lighted, clinic rooms. This defect is particularly noticeable in dispensaries occupying basements of hospital buildings.
- (ii) The small size of clinic rooms made necessary by the provision of large numbers of special clinics.
- (iii) The lack, because of restricted clinic space, of provision of booths or cubicles for dressing and undressing patients.
- (iv) The lack of proper grouping of clinic rooms so as to make easy reference and consultation between clinics having associated interests.
- (v) The lack of proper waiting room space before clinic rooms, so that distribution of patients may be made quickly from the general waiting room.
- (vi) Bad distribution of space, as, for example, devoting a large part of the main, well lighted dispensary floor to the drug department instead of to clinic rooms.
- (vii) Lack of proper quarters for social workers in immediate vicinity of the patients' waiting room.

Waiting Room Space Desirable

Apart from a better arrangement of clinic hours which will reduce the number of patients coming to the dispensary at any one time, much can be done to remedy the defects mentioned, even without any increase of the size of existing dispensary plants. If the dispensary is not adequately lighted by day light, the artificial lighting should be the very best possible. Fixtures should be arranged properly so as to give maximum illumination when the physician wants it. The size of the electric light bulb used is worth considering, and in certain instances the use of the "daylight" incandescent lights may be found helpful.

Even though the clinic rooms are small and their size cannot be increased, the number of patients received certainly can be limited to suit facilities, and the number of special clinics can in many instances be reduced so that the most essential ones can have proper working space. Once the decision is made as to what clinics are really essential, clinic rooms can be grouped according to their proper associative relations. Reduction in the number of special clinics and their regrouping would help considerably at the Harlem Hospital Dispensary, for example.

Such reduction in the number of clinics and their regrouping according to their association of interests would perhaps permit also more adequate facilities for the preparation of patients. Collapsible screens or curtained booths could be provided, which could be taken down and put away when not in use.

Ample waiting room space outside the clinic rooms and apart from the general waiting room space is particularly desirable in large dispensaries as it expedites distribution of patients and segregates patients for a social service interview. Even though there is not adequate space outside of clinic rooms, the general waiting room can be divided into sections, as conveniently located to the clinic room as possible, and this helps considerably. This is done, for example, at the Manhattan Eye, Ear, Nose, and Throat Hospital, and the clinic physician, by looking over his patients, can determine how he will adjust his own time to meet the dispensary schedule.

The distribution of space to the various features of dispensary work is also an important consideration, but one to which sufficient attention has not been given in most of the institutions. The essential thing is, of course, to have proper facilities for the examination and treatment of patients, and yet in certain institutions the most desirable space has been given to other less important features of the dispensary. For example, at the Demilt Dispensary the drug room occupies space on the well lighted main floor of the dispensary to the exclusion of clinic rooms, several of which are in the basement. It goes without saying that accommodations as adequate as possible should be provided for the drug room, the x-ray room, and the laboratory, but where space is at a premium, clinic rooms should receive first consideration.

It would be a difficult matter in many hospital dispensaries to provide extra clinic space, particularly in the summer months, by the erection of temporary tent quarters for clinics on the hospital grounds. This has in fact been done at Fordham Hospital for the pre-natal clinic.

Location of Social Service Worker

In many instances the location of the social service headquarters far away from the waiting room of the clinic results in the social workers themselves being somewhat detached from the routine of the dispensary. But even where space for the social service worker is not readily available, provision can certainly be made for a table and a few chairs in close proximity to the waiting room, so that the social worker can obtain that direct contact and intimate relation to the dispensary concerns which she should have.

Without attempting to enter into a detailed discussion of dispensary arrangement and equipment, it may perhaps be helpful to point out excellencies of construction and arrangement illustrated in certain of the dispensaries studied.

One of the most complete dispensary plants, all things considered, seen in this study is that at Mount Sinai Hospital. This dispensary occupies five floors and is con-

nected by underground passageway with a special building of children's clinics. Effort has been made in grouping clinics to have frequently associated clinics work on the same floor. Clinic rooms are all ample in size and naturally lighted. There is large waiting room space on each floor, so that patients are quickly distributed from the main waiting room on the ground floor. Working conditions for physicians are satisfactory throughout. Similarly, at the new Gouverneur Hospital Dispensary, three floors are devoted to dispensary work, and associated clinics are grouped on the various floors.

The dispensaries of the Hospital for the Ruptured and Crippled, the New York Orthopedic Hospital, and the Manhattan Eye, Ear, Nose, and Throat Hospital are examples of the one-floor dispensary type. The buildings are of comparatively recent construction and were planned expressly for the special work done in them. The New York Orthopedic Hospital Dispensary has a rather unique arrangement of clinic rooms. Instead of the conventional arrangement of central waiting room with clinic rooms at the side, the waiting room, with the registrar's office, is not directly connected with the clinic rooms, the latter being grouped about a central rotunda. Clinics for males are on one side and for females on the other side, with a secretary's office between, in the center of the rotunda.

Patients Seated Near Clinics

The New York Dispensary, which is also of modern type of construction, is essentially a one-floor dispensary, although a second floor is utilized for the financial affairs, dental clinic, and woman's genito-urinary clinic. The large general waiting room on the main floor is so divided into sections that patients destined for special clinics are segregated and seated near such clinics.

The Brooklyn Hospital Dispensary, which is also of recent construction, comprises two principal clinic floors and a basement which is utilized for massage and exercise of orthopedic patients. The arrangement of clinic rooms is conventional, but here also clinic rooms have been grouped according to their association of interests. Clinic rooms are all ample in size, well lighted and ventilated, and arranged with an eye to the convenience of physicians. A special feature here is the arrangement of the genito-urinary clinic *en suite* with an entrance directly from the street, as well as from the main dispensary floor. This makes easy the utilization of this part of the dispensary for evening clinics.

Special Arrangements Facilitate Registration

The Post-Graduate Hospital Dispensary, though considerably handicapped for space, by reason of the extension of special clinic services made necessary by the postgraduate instruction program, has several excellent features of arrangement which contribute in no small degree to its efficiency. The general waiting room at the entrance is small, but patients are registered rapidly and assigned to clinics, so that a large waiting room is not essential.

Each clinic has its own special waiting space in the corridors before the clinics, and clinics are so grouped on the various floors that reference from one clinic to another and consultation are readily arranged. The drug room is near the exit, which is at the opposite end of the building from the entrance, and this helps to relieve congestion to a marked degree. Patients come into the dispensary, are segregated and distributed, treated and prescribed for, and go out in orderly fashion at the opposite end of the building.

At the Polhemus Clinic (Long Island College Hospital Dispensary) an especially noteworthy feature is the equipment of clinic waiting rooms with booths in which patients may dress and undress. The results of this innovation upon the attitude of the patient, and upon the efficiency with which routine work is done, more than justify the utilization of clinic room space for this purpose.

From the illustrations here given it is possible to draw certain general conclusions regarding the most efficient arrangement of dispensary plants.

(i) The general waiting room space need not be large if patients are expeditiously registered, segregated, and assigned to clinics, but there should be ample waiting room space at the entrance to each clinic, or at least the general waiting room should be so divided into sections as to segregate patients destined for clinics conveniently adjacent to them.

(ii) The dispensary should be so arranged that patients do not come in and go out at the same entrance, in order to avoid confusion and congestion and the last need of the patient, i.e., the prescription, should be provided at a drug room located near the exit.

(iii) Clinics should be grouped on floors or in sections according to their special association. For example, genito-urinary disease clinics, gynecological clinics, and skin clinics should be closely connected; the nose and throat clinic and the ear clinic, which are so closely related in function, should be closely connected physically; clinics for general medicine, and for such specialties as tuberculosis and gastro-intestinal disease should be grouped, and so on. The exact grouping would, of course, need to be determined according to each dispensary's needs.

(iv) If a general dispensary laboratory is provided, such laboratory should be located, if possible, on the main clinic floor, rather than at the top of the building, as is usually the case. Easy access to the laboratory from clinic rooms would, perhaps, aid materially in increasing the use made of it. Since the laboratory is used more by certain types of clinics than by others, it should be as conveniently located to such clinics as possible.

(v) Looking toward the development of evening clinics for genito-urinary diseases, separate entrance to the genito-urinary clinic room or rooms should be provided, so that the general dispensary quarters may be closed if desired during the evening.

(vi) The social service department should be near the entrance and general waiting room, rather than on the upper floors of the dispensary or in a remote part of the building, in order that the contact of the social service department with the patient may be from the beginning rather than at the end.

(vii) No more clinic rooms should be provided than the dispensary space can furnish properly. It would be far better to have a few special clinics, with ample working room for each, than to have a larger number of clinic rooms, with inadequate working space.

(viii) Clinic rooms or suites should be large enough to permit their equipment with individual dressing rooms or booths, so that several patients may be admitted and prepared for examination at one time, not only to expedite the physicians' work, but also to give patients a certain degree of privacy which they ought to have.

At the Dispensary

A boy telephoned to a dispensary the other day and said, "Say, Missus, when can a feller come to the dispen-

sary to have his stomach looked at?" The only way the nurse had of distinguishing between stomach and abdominal cases was to ask whether it was the *upper* or *lower* stomach. So she asked him and heard him call the length of the room, "Hey, Bill, she wants to know whether it is your upper or lower stomach."

HARVARD ENGINEER IN BUREAU OF HYGIENE

Professor George C. Whipple, of Harvard University, has been appointed director of the Division of Sanitation, in the Bureau of Hygiene, of the League of Red Cross Societies. He will at once take up the task of organizing this new and important work, which is designed to become a sort of international health department and general clearing house for the exchange of information on public health activities in all parts of the world. Professor Whipple will continue until February in his work at Harvard, where he is secretary of the School of Public Health and professor of sanitary engineering.

Professor Whipple is widely known as an authority on water supply. His work has carried him to various parts of the United States, and as deputy commissioner of the American Red Cross Mission to Siberia, brought him into contact with the sanitary needs of many countries.

SERBS USE AMERICAN HOSPITALS AS MODELS

The American Red Cross hospitals in Podgoritz and Kolachin are to be used as models for all Serbian military hospitals throughout Montenegro and Dalmatia. After a trip of inspection of these hospitals, Major Bozidor Jankovitz, surgeon general for those divisions of the Serb army, issued an order to that effect.

The Red Cross doctors and nurses who planned, furnished, and operated these hospitals considered them the most pitiful makeshifts. They have been obliged to use Austrian iron cots without springs for the patients, and hand-made wooden tables, dressing stands, and medicine closets. For dippers they have condensed milk cans, and for boilers and water buckets, old gasoline cans. They have made their stoves themselves of cement and iron. Instruments are few, dressings are sterilized and used over and over again, and what few rubber gloves they have are patched and repatched over and over again, with tire cement.

Nevertheless, it is these makeshifts which the Serbs desire to copy. "It is no use for us to go to Paris or New York to see hospitals," said Major Jankovitz, in the course of a conversation with Miss Lena Johnson, head nurse of the hospital. "We cannot copy these wonderful hospitals, for Serbia. We have neither the fittings nor the money to get them. But you have been an education for us. You come here, as we do, with only a few supplies. You create out of packing boxes and petrol tins and the work of your own hands, hospitals that are immaculately clean, that give sunshine and air and good food as well as skilled attention to your patients. It is no wonder that ours die and yours get well."

"But," he added, "now that we have seen how it can be done, you shall not find us backward pupils. I wish to have all your appliances—your tables, chairs, mattresses, especially your operating rooms, copied exactly. I shall order that the Serbian military hospitals follow the example of the Americans. If we can do what you are doing here, it will be the greatest thing you have brought to Montenegro."

DIETETICS AND INSTITUTIONAL FOOD SERVICE

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DETECTING HOSPITAL FOOD WASTE

By ERNEST E. IRONS, M.D., Chicago, Ill.

Hospitals are now experiencing great difficulties in balancing expense with income, and are endeavoring to meet the situation by increase of charges, closer buying, and by curtailment of expense by installation of improved systems. But there is one source of saving that seems to have been neglected. The garbage can has received some attention, but the possibilities in this direction have been for the most part overlooked. Any hospital superintendent would be delighted with an additional endowment of \$100,000, and would be willing even to erect a tablet to the memory of the donor. And yet in many of the larger hospitals an amount much larger than the income from such an endowment is being needlessly thrown out in garbage each year, a waste that may be eliminated to a large extent. While it is true that the nature of the hospital problem makes a certain degree of waste inevitable, the enormous waste which is easily demonstrated even in well managed hospitals, seems entirely unnecessary. Much was accomplished both in private homes and in institutions in the saving of food during the war, but two years is too short a time in which to break a national bad habit, and in spite of rising prices, we are slipping back rather than going forward. Apart from the question of dollars, which makes the strongest appeal to many of us, including hospital superintendents, there are two other reasons for the avoidance of food waste. Even in this country, rich in resources, and able to produce more than is necessary for the feeding of its people, there are today many who have not enough to eat, and every pound of waste places an adequate supply of food farther from their reach. The question of labor is also involved, for as food passes from field to storehouse, it represents an increasing amount of expended labor, and looked at from this standpoint it would be cheaper to throw wheat away than to waste an equivalent amount of flour and better to throw flour into the garbage can than to waste it in the form of bread. Yet it is so easy to throw out slices of bread.

Why Waste Occurs

It is of interest to note some of the general facts about waste. Waste of food does not usually result from deliberate intent to destroy, but occurs rather because of failure to recognize waste, and because the system of handling food takes too little account of the needs, feelings, and impulses of the ultimate consumer—the patient or employee. A superficial survey in the hospital may have seemed to indicate that the correction of evident food waste would entail an expenditure of thought or labor not justified by the saving attainable. More often, the waste

has been viewed only from the garbage platform, and from this viewpoint, it usually seems unavoidable, and the situation hopeless.

Very few hospital superintendents know the amount and character of the garbage which leaves the hospital daily, or the cost of this garbage when bought as food. The making of a satisfactory arrangement whereby the garbage is taken away at no expense to the hospital is often regarded as a triumph. If the volume of garbage is large enough and local conditions favorable so that it can be sold for a small amount to a reduction plant, or for the feeding of hogs, the very fact that the garbage yields a revenue serves as an excuse for overflowing cans, and it is not realized that what is sold for a few cents represents a direct cost of ten or more times this amount when bought as food a few days before. Most of the larger hospitals have fairly well developed methods of buying, and costs of food are carefully computed, but very few hospitals have available figures to show the percentage of the original cost of food that is ultimately carried away as garbage.

Any hospital superintendent may spend a morning profitably in an inspection of the garbage cans, their surroundings, cleanliness, number, weight, and contents. The profit of his morning will be increased if he becomes curious as to just where the articles he finds came from, whether from the general kitchen, the dining rooms, or the wards. If he investigates further, he will find that the amount of table waste is not the same from all wards, even though they contain the same numbers of patients; that the dining rooms yield different amounts of table waste quite out of proportion to the number of meals served; that the relative amounts of table waste vary with menus, even though the daily cost sheet shows no corresponding fluctuation.

Successful Distribution of Food

Some of the factors which contribute to the successful distribution of food are the following: careful purchase of good qualities of food, adequate storage, careful preparation and good cooking, intelligent planning of menus by the dietitians, thoughtful prescribing of dietaries by attending physicians; an adequate system of service whereby food arrives at the bedside of the patient in an appetizing state—hot foods not cool, and cold foods not warm—neat and attractive service on trays, and a sympathetic and intelligent supervision of the food of each patient by the nurses in charge of the wards.

To attempt to solve the problem of the garbage can without considering all these and similar factors is to waste effort, and to fail to reach the goal. The separation and weighing of waste food gives valuable data. The

problem is therefore an extensive one, and calls for the development of an institutional *esprit de corps*.

It may be safely stated that the hospital is rare indeed in which the personnel concerned in each of the stages of the distribution process, are conscious of the full responsibility devolving upon them. Granting that in most respects the preparation of food is fairly well performed, a hospital may still suffer serious and unnecessary loss through neglect of two elements of the problems. These are the ultimate consumer (the patient), and the character and amount of waste which he causes.

Personal Interest of the Nurse

As more patients are treated in wards than in private rooms, we may profitably consider for a moment what happens to John Smith who has a broken leg. His appetite, formerly good, has recently failed by reason of long confinement in bed, and seems to leave him at sight of the amount of food piled up on his tray. It is often cold. He does not like carrots, but regularly the carrots come, and as regularly are sent out to be thrown away. He eats little bread, but as all trays receive a whole slice of bread at least a half slice on his tray is thrown away. The maid brings in the trays at 11:45 a. m., and removes them at 12:15 p. m., and the nurse in charge of the ward assures herself that the schedule of soft, light, and full trays posted in the kitchen has been followed; otherwise there has been no supervision of the meals. The other patients have the same sort of unrecognized troubles as Smith, except that their likes and dislikes are perhaps different.

In the surgical ward across the corridor Jones also has a broken leg. The nurse in charge is better acquainted with her patients and is usually able to arrange a substitute for what Jones does not like or at least sees that he does not receive things she knows he will not eat. She seems never to hurry, but always happens to be around in the diet kitchen or the ward when things start to go wrong, and she seems to have very little trouble. Her garbage can usually contains less than half as much as that of the neighboring ward.

The difference between these two wards lies in the personal interest the nurse takes in her patients, her study of their likes and dislikes. The patients appreciate this personal touch, and immediately respond by cooperating in many little, helpful ways, and if they were asked to help further in avoiding waste, would join gladly in an effort to make the ward the most thrifty in the hospital.

System is absolutely necessary in the feeding of patients, but there are two kinds of system, that with a soul and that without a soul. Whenever patients are treated as so many cases, instead of as individuals, each with his own peculiarities, the ward becomes a machine, without the good attributes of automatic machinery. Personal interest in patients pays dividends not only in saving of waste, but in preventing errors and lapses and in maintaining a spirit of cordial cooperation between hospital and patient.

It is evident that to be ultimately successful and therefore worth while, efforts planned to decrease waste (whether of food, gauze, surgical supplies, electric light, or gas) must be not spasmodic, nor initiated after the manner of a crusade, but rather directed at fundamental principles which underlie the processes of preparation and distribution of a commodity, from the time it enters the institution until it has been utilized.

The amount of waste which is unavoidable, under given conditions will no doubt vary with the character of the

hospital, and therefore dogmatic statements and unqualified comparisons are undesirable. It is also possible to so overestimate the importance of methods for preventing waste, that the time and labor expended on them constitute so great a charge as to overbalance the saving accomplished, and thus inadvertently to substitute a new source of waste for the old one.

It is proposed to attempt to point out some of the reasons why food waste occurs, and how it can be to some extent controlled, by referring first to methods employed in an army hospital, and then by applying the same principles to civilian hospitals. The difference between the two types of hospitals is less than is generally supposed. The element of discipline, which is sometimes thought to be an asset in the army hospital forever out of reach of the civilian institution, is much misunderstood. The essence of discipline is prompt and willing compliance with instructions, and to obtain it the commander must have the active cooperation of his command. When he has this cooperation, everyone is so busy doing his part that no one thinks of discipline. This constitutes a happy command. With a well thought out plan, adequate supervision, and continuous study of human nature, there is no reason why the same cooperation cannot be obtained in the civil hospital.

Savings Attained in an Army Hospital

The Food Division of the Surgeon General's Office, in a survey of camps in 1918, found an average food waste of .38 pounds edible and .9 pounds total waste per ration for 437 messes in army camps. It is, of course, obvious that local conditions, lack of kitchen facilities, and trained organization, led in some camps to high waste which was later corrected. In other camps where conditions had been more favorable, the waste was much lower. In army camps, separation of garbage into several classes was insisted upon by the Reclamation Service, chiefly for the purpose of facilitating disposal. Thus separate cans were supplied to each mess for the reception of (1) edible food (i. e., food which could be fed to animals); (2) non-edible garbage (such as lemon rinds, coffee grounds, egg shells); (3) bones and fats (yielding grease); (4) tin cans; (5) sweepings. Advantage was taken of this compulsory separation of garbage, to obtain, by carrying the separation a step further, figures on the amounts of garbage which were yielded under varying conditions in the base hospital, and by further separating garbage classed under (1) edible food, into (a) table waste, and (b) unavoidable kitchen waste, derived from preparation of food such as potato and other vegetable parings, to get a basis of comparison of waste from day to day.

This separation of table waste from kitchen waste and from inedible garbage such as fruit rinds was obviously necessary if the avoidable wastes of any two periods were to be compared. Without the separation of inedible rinds from table waste, the addition of water melon for instance to a day's menu, would result in a vitiation of the figures of avoidable waste for that day.

At the base hospital, Camp Custer, the cooperation of enlisted personnel, nurses, and officers had been such that waste of food had always been far below the averages given above. By urging the necessity of conserving food, and by a general supervision of messes, the average waste per ration (per person per day) derived from edible food, was reduced to between 1.50 ounces and 2.0 ounces. Thus the daily hospital average for all messes for the week ending July 28, 1918, was 1.85 ounces. At this point the inspection and weighing of table waste from

each ward and each mess was instituted, and the edible waste fell progressively. For the week ending August 4, the average was 1.25 ounces; August 11, 1.22 ounces; September 7, 0.30 ounces; September 28, 0.15 ounces. For the months of September and October, including the first portion of the influenza epidemic, with its attendant strain on the personnel, the average waste for 134, 730 rations was 0.26 ounces. In a civil hospital of 400 beds, feeding in addition a personnel of 300, an equivalent amount of waste would give 11 pounds of edible food as garbage daily.

The saving thus made possible by detailed inspection may be expressed more clearly if reduced to money values. The difference between the average of 0.26 ounces and the average waste of 1.85 ounces which itself was a low figure compared to that found by the food division, was approximately 1.5 ounces. When this apparently insignificant saving is multiplied by the number of rations served, it is found that 12,000 pounds of edible food were saved in two months at a time when the conservation of food, independent of its money value, was of vital importance. Careful studies of costs of food made at this time showed that at the quartermaster prices the cost of food as served was approximately ten cents per pound. The money value of the saving was therefore \$1,200. Computed on the basis of average waste of edible food in 437 messes, this saving would amount to 49,000 pounds which, at ten cents per pound, would cost \$4,900. As it was not desired to accumulate a large mess fund, but rather to improve the quality of food which could be served for the ration allowance (\$0.50 to \$0.60 per day), the saving thus effected was used for the purchase of additional articles of food such as fresh fruit and vegetables. Avoidance of waste in this way became a matter of personal interest to everyone, because it meant more and better food. Under these conditions any sudden rise in edible waste usually indicated a defect in the quality of food bought, or a fault in its preparation, which could be immediately detected and corrected.

The essentials of the system which made this saving possible were:

1. Provision of a clean garbage station convenient to the kitchen.
2. Separation of garbage at its source, in each mess and ward.
3. Collection of garbage from each unit, and the recording of character and amount by actual weight, by an intelligent man who was interested in his work.
4. Daily report of the garbage return, showing amount and kind coming from each unit.
5. Inspection by chief nurse, dietitian, and other department heads, to determine and remedy the causes of waste shown by reports.
6. Active cooperation by all of the personnel.

Weighing of Food Necessary

It is important to note that in spite of a well organized kitchen and distributing service, and continued cooperation on the part of the personnel it was not possible to reduce the table waste below 1.85 ounces per person per day, without the weighing and reporting of garbage. The combined waste of edible food in the hospital fell to an incredibly low figure immediately upon the institution of daily inspection and weighing of garbage from each unit, as this fixed responsibility, and introduced the element of friendly competition.

Food waste in the civil hospital will go on until an adequate system of garbage control is instituted. The

installation of such a system is not difficult, nor does it require any complex apparatus. It should provide for the separation of table waste from other ward waste in cans provided for each ward or administrative unit. Simple instructions to nurses and maids will ensure this primary separation, which makes subsequent sorting at the central garbage collecting point unnecessary. These cans are collected daily or oftener if necessary, and their contents weighed. This work should be supervised by a man who is chosen not because he is unsuited for any other work, but because he will take an interest in his job, and will render accurate reports. These reports should reach the superintendent daily, and inform him of the amount of garbage produced by each unit of the hospital. By inserting in the report the number of patients in each unit, the *per capita* waste is reckoned for each day. The distribution of copies of the daily report to the dietitian, the superintendent of nurses, head nurses of units, and the chef, will help to keep the subject of saving before them, and will quickly stimulate competition among ward units.

Attention may be profitably given to the hospital garbage room or platform. In many hospitals, where sanitation is supposed to be best developed, the garbage plant is ill smelling, dirty, and inhabited by myriads of flies. Money spent for the construction of a comfortable, screened room, with cement floor and drain, and facilities for washing all cans before they are returned to the wards, is one of the best investments a hospital can make. Such a room can be kept as sweet and clean as any other part of the hospital.

The objection will be raised that the separation of garbage on the ward into that derived from the table or tray waste, and that coming from other sources, entails the handling of two cans in place of one, an event which is at once viewed with alarm by the supervisor of male help. Just as soon as efforts at saving become effective, however, the table waste will be readily contained in one small pail which will fit inside the larger can, and weights of garbage will begin to be recorded in ounces instead of pounds. It is the excessive waste that at the present time makes the handling of garbage a serious labor problem. Reduce the waste, and the expense of handling it also decreases.

Results Attained in Civil Hospital

There is no question but that even a limited attempt at inspection and control of garbage will result in substantial savings of waste. Any sane agitation will do some good, for in some hospitals waste is excessive.

In one civil hospital of some 400 beds, a brief survey of the garbage situation revealed some rather startling facts. The total daily garbage was over 1,000 pounds, of which only 303 pounds came from the kitchens. Separation of the waste into that derived from edible food, and that from other sources in five units yielding figures which applied to all units, showed that in the ward units 60 to 70 per cent of the waste came from edible food, and was equivalent to 1.02 pounds per patient. In the dining rooms of the personnel, 75 per cent of the waste came from edible food, and amounted to 49 pounds per day, or 0.35 pound per person per day. The food from dining rooms alone at 20 cents per pound cost \$9.80 per day, or \$294.00 per month.

As the survey progressed, it occasioned more or less remark and resulted at once in the recognition of the serious loss through waste, so that within three weeks the total daily garbage was decreased by 385 pounds. Other interesting facts appeared in this survey. The units

showing greatest improvement were those consisting entirely of ward patients; next in order of improvement were units containing private rooms and wards; the units consisting entirely of private rooms showed no response whatever. In one unit consisting entirely of wards, in which garbage was separated, the total garbage per day (average of 6 days), was 42 pounds, of which 21 pounds was derived from edible food (0.62 pound per patient). Later the daily average of total garbage from this ward fell to 20.5 pounds per day.

TABLE I.—SHOWING GARBAGE FROM HOSPITAL UNITS BEFORE AND AFTER WEIGHING GARBAGE AND LIMITED PROPAGANDA FOR SAVING

Hospital Unit	Character of Unit	Approximate Number of Patients	First Period Total Garbage in Pounds Per Day	Second Period Total Garbage in Pounds Per Day
A	Wards and rooms	53	101	37
B	Wards and rooms	54	127	25
C	Wards	42	51	13.5
D	Wards	33	25	7
E	Wards	27	27	6.3
F	Wards	34	50	25
G	Wards	36	36	20.5
H	Wards and private rooms	28	60	58.6
I	Private rooms	29	32	36.2
K	Private rooms	24	36	30.2
L	Private rooms	31	42	40.8
M	Private rooms	11	22	22.6
Total		412	609	322.9
Dining rooms (personnel)		285	134	34.9
Total, patients and dining room personnel		697	743	357.8

The figures given in this table are for unseparated garbage, and so do not tell the complete story as to edible food waste. The reduction during the second period was no doubt the result of elimination of substances previously improperly placed in the garbage, as well as the result of food savings; in this connection the failure of response by units consisting entirely of private rooms is of interest. The private room patient offers a problem somewhat different from that of the patient in the ward. The patient in the private room who pays from \$5 to \$10 per day, and often, in addition, has a special nurse, feels he is entitled to waste food if he so desires, and it may be good business on the part of the hospital to allow him this privilege undisturbed, as one of the perquisites for which he pays. The amount of food wasted by this class of patients is larger than that wasted in the wards, but is a much smaller per cent of the revenue received from these patients by the hospital, than is the waste of the ward patient who is cared for free, or pays an amount less than the average *per capita* hospital cost.

Not infrequently the special nurse seems to assume that her private room patient will esteem her services in proportion to the amount of material and food which she can waste for the hospital. But in spite of difficulties it is believed that much saving can be accomplished in private rooms by tactful education of special nurses, and by a better knowledge of the individual needs of patients on the part of the dietitian.

It is evident that the separation, weighing, and reporting of garbage is not an end in itself, but is only one of the essential factors in the control of food waste. The

garbage report is a valuable index of what is going on, and of the results obtained by increased thought and care on the part of the entire personnel.

It is futile to complain of the wastefulness of maids, or the lack of attention on the part of nurses whose duties are frequently changed, and at the same time to provide no supervision in the preparation of trays, and no system showing unit saving or waste. Individualization is as necessary in the handling of maids as in caring for patients. The same maids who have previously contributed to the general waste, will be enthusiastic in its prevention when unit competition is established, and a new element of interest will be introduced into the humdrum of kitchen service.

From an administrative standpoint, the changes which seem necessary to correct present waste are a better co-ordination between heads of departments, and a readjustment of lines of responsibility. The dietitian should be responsible to the hospital superintendent, either directly, or through the superintendent of nurses, and should have authority in dietetic matters over the entire hospital. The presence of the dietitian, in the wards and unit diet stations, working in close cooperation with nurses will go far toward establishing the liaison necessary to maintain continued interest in giving the best service possible to the patient.

The ordinary table waste in most hospitals is so glaring that other less striking but considerable sources of waste are likely to pass unnoticed. One of these is the abuse of special diets. The institution of the diet kitchen, with a trained dietitian in charge, is one of the marks of progress in hospital administration. The restriction of the dietitian in many instances to the supervision of special diets instead of extending the benefits of her training to the entire hospital dietary, results not only in a loss of efficient help to the hospital, but places the diet kitchen less closely in touch with general hospital problems than it should be. In some hospitals, particularly public institutions where special diets are provided, numerous patients are placed on special diets without clear medical reasons for doing so, and these patients receive food which is of no special benefit to them, and in the preparation of which the expense for labor is more than doubled. It sometimes happens that special diets are substituted because of the poor quality of ward food. Such a situation is an indication of serious fundamental error in the general kitchen, which would be much less likely to develop were the powers of the dietitian extended to the general kitchen. As matters now stand in many hospitals, the authority and interest of the dietitian are limited by the door of the special diet kitchen. She expends too much time arranging lettuce leaves, and is only called to the floors by the head nurse as a last resort, in a despairing effort to pacify a recalcitrant patient who objects to having canned spinach served in summer time.

Having obtained a reduction of waste so that garbage cans no longer contain the large amounts of edible food previously present, the question may reasonably be asked, "Can this saving be shown in dollars cut from operating expenses?" This will depend on the effectiveness of the system of storeroom requisitions, and the attempt to answer the question will usually disclose that the storeroom system is also extremely lax. With a daily expense for food in larger hospitals of \$500, a saving of \$25 per day may be hard to demonstrate in figures. It will be a profitable proceeding to attempt the demonstration, however, for thereby other totally unsuspected leaks will undoubtedly be brought to light.

DIETITIANS MEET IN PHILADELPHIA

The regular monthly meeting of the Dietitians' Section of the Home Economic Association of Philadelphia was held at the Pennsylvania Hospital, Eighth and Spruce Streets, on November 6. Mr. Miller of the Swaco Company gave an interesting and instructive talk on Detergents and Soap Savers. The program for future meetings was discussed and plans made for joint meetings with the Philadelphia Company Medical Society, the Home Economic Association of Philadelphia, and the National League of Nursing Education. Miss Gladwyn of the Jefferson Hospital was appointed to report on current topics in the dietitian world at the regular meetings.

SOCIAL SERVICE DIETETICS IN RELATION TO JEWISH PROBLEMS*

By MARY L. SCHAPIRO, Director, Bureau of Home Economics and Dietetics, United Hebrew Charities, New York City.

Time travels fast in these days, and it is, seemingly, a long time since the days of the industrial revolution and the changes which it ushered in; yet we have not gone far enough to get away from the results of these changes, and it may not, therefore, be amiss to point out briefly how it affects our homes to-day.

The important change, which the industrial revolution has brought about is an economic one, i.e., society which was mainly agrarian has now become industrial. This means that many of the commodities which woman made in the home were taken out of it and made in the factory. Thus woman's position was changed from producer and consumer to that of consumer only—man being the producer. This state of affairs obtained largely until very recently.

We all know that in the industrial world competition has forced man to make every possible effort to increase his productivity. He has developed labor-saving devices and every possible expedient which makes for more efficient management of his business. The home has not had that same pressure brought to bear upon it, hence it has not kept pace with the progress of the race. Man has been content to brook in his home a degree of inefficiency which he would under no circumstances tolerate in his business. This was no fault of man but of society which took it for granted that every woman would, without training, be an efficient manager, and an able dietitian, nurse, and social director of the home.

It was only within the last century that a realization of the fact that it is necessary for woman to have some education was acted upon, and that women were admitted to higher schools. It is in the last quarter of the present century, however, that we have begun to realize that in addition to a general education, woman needs some specific education for her specific occupation—that of home-maker. It must be said to the credit of our country that more of its women are educated than are those of any other country in the world. How adequate this education is in training them for their life problems is best attested to by the fact that over 30 per cent of the applicants for military service had to be rejected for physical reasons. To be sure, some of the men were rejected for reasons for which the mother was not responsible; on the other hand, however, this figure might have been materially increased if women were also obliged to submit to a similar physical examination.

It might be well to digress for a moment and consider the life story of the average woman. She goes to school,

perhaps through the elementary grades. At fourteen or fifteen she goes to work in the factory, the shop, or the office. Instead of receiving the training which the girl who stayed at home with her mother received from her mother, she actually becomes a boarder. The home is her restaurant, her lodging place. At twenty-five—sometimes earlier, sometimes later—she marries and has to conduct a restaurant and lodging house for her family, but is utterly unprepared. She is not nearly as well prepared as is her less enterprising sister. While the latter's pre-marital existence may have been more narrow, she has at least been fairly well trained for her future work by her mother, even though it has been by a rule of thumb method. The results for the girl who goes to work are lamentable. Many homes which might otherwise have been happy ones are yearly destroyed because of this. The return of the woman of industry to the home often spells tragedy. Fortunately, however, a great many of these tragedies may be averted by the judicious Home Economics and Dietetics social worker.

The fact of the matter is—and people are beginning to realize it—that the feeding of the family is a job for which one needs to be trained. If this is true of the average woman, how much more true is it of the poor. Social workers realize that the poor, in addition to being poor, are also inefficient. Perhaps this is one of the reasons why they are poor. At any rate, they have need for fully as much special training as has the average woman. Organizations with broad social vision have already recognized this need and are meeting it.

With even a comparatively short course in the fundamentals of home-making, the woman who has had this course makes a very much more efficient member of society, a better citizen and mother and a better trainer of our future citizens, than does the home-bred girl. The types of women that we deal with in the Bureau of Home Economics and Dietetics, however, require considerably more than this, because most of them are Jewish immigrants who go to work at an early age, and who, because of this, have not had the opportunities for schooling which our American girls have had. They, therefore, have not been able to make proper adjustments to their new environment. In addition to this, they start out hampered by a code of dietetic laws and a set of customs which they do not know how to convert into present day, usable form. To be sure their children go to school, but because the teachers, for the most part, have not understood the dietary restrictions, they have been unable to make their lessons effective.

In the space of this paper, it would be impossible to go fully into the matter of dietary laws and customs, but in order to point out some of the problems that must be considered when dealing with Jewish families, I will mention a few of the most important.

Important Jewish Dietary Laws

The dietary laws are sanitary and hygienic rather than religious, although, as has often been done with masses of people who were not enlightened, a religious aspect has been thrown about them in order to insure their observance. People have been made to feel that the breaking of one of these dietary laws was sinful. It really was breaking the law—a physical law rather than a religious law—but this they would not have understood.

The dietary laws divide themselves into four groups:

- (1) Prohibition of certain foods.
- (2) Partial prohibition of certain foods.
- (3) Regulations governing cooking practices.
- (4) Regulations governing holidays and the Sabbath.

* Read at the Second Annual Convention of the American Dietetic Association, Cincinnati, O., Sept. 8-12.

I am going to take the staple foods and go through the dietary laws which relate to each one of them.

Meat.—Only such meat as comes from animals that chew the cud and have cloven hoofs may be used. This bars the swine and similar animals. All cattle for consumption must be killed in a prescribed manner and can be used only after thorough inspection. After the killing it is again inspected and if the animal is found to be anatomically and physically in good condition, its sale is permitted. No such meat may be kept more than three days. After the meat reaches the housewife, it is soaked for a half hour and salted for an hour in order to remove the blood. A number of reasons are ascribed for this rule, which I will not go into here.

Fish.—All fish must have fins and scales. No scavengers are permitted because of danger of ptomaines. Shell fish are prohibited because of danger of typhoid; eels because of the danger of mistaking them for water snakes.

Cereals, Fruits, and Vegetables.—Cereals must be carefully looked over lest they be wormy. This is done by placing some on a hot plate; if there are any worms they come out. Dried fruits must be cut into, lest they be wormy, before cooking. Dried vegetables must be looked over in the same way as cereals.

Milk and Dairy Products.—One of the regulations governing cooking practices which has been responsible for a great deal of difficulty in the handling of the Jewish food problems, has been the law forbidding, "the seething of a kid in its mother's milk." This means that one may not eat meat products at the same meal that milk or dairy products are served. This prohibition makes it impossible for butter or cream sauce to appear on vegetables at the same meal with meat, and is a great stumbling block in the way of those who would plan menus for Jewish homes. On the face of it, this ruling is humanitarian; actually, one finds that it is also hygienic.

Sabbath and Holidays.—There are special regulations pertaining to the Sabbath and holidays which are extremely interesting but for which I will not have time.

As already indicated, the diet of the Jew no matter how poor, has many of the qualities of the diet of the rich man. It is tasty, well cooked, nourishing, and there is plenty of it. Jewish cookery is famous, and justly so. Many a man, long away from his home returns to relish his mother's cooking.

Defects of Jewish Cookery

While it is often rightly claimed that there is no Jewish cookery because it varies with the country from which it comes—that there is Roumanian cookery, Russian cookery, and others like them—it is, nevertheless, true that all Jewish foods have certain common qualities which really make for a distinctly Jewish cookery. This cookery, as has been proved by scientific study, has not only common virtue, but also common defects. For example:

(a) The diet is *unbalanced*. The mineral content is deficient. There is not enough use of fruits, vegetables, or cereals. There is a disproportionate use of some foods to the exclusion of others as, for example, too much herring and not enough spinach.

(b) The diet is *over-rich*. Too much fat and sweetening are used.

(c) The diet is *over-seasoned*. Too much salt, pepper, mustard, spices, vinegar, and pickles are used.

While, as already indicated, the Jewish diet has many desirable characteristics, the above mentioned defects are sufficiently important to require most careful thought and consideration, especially since the Jewish people suffer from so many dietary diseases because of this. As is now generally believed, cancer is a disease caused by irritation.

Physicians on the east side seem to be of the opinion that cancer of the stomach is more prevalent among Jews than among the people of any other race. We all know that the use of condiments and high seasonings has an irritating effect on the mucous membrane of the stomach. Diabetes is very prevalent among the Jewish people, so also are many other dietetic ills. This indicates the need for dietetic study among all Jews. But the need seems to me to be especially keen among the poorer Jews.

The diet of the poorer Jews shows all the characteristic defects of the diet of the more well-to-do, except that all of these defects are emphasized and made worse by lack of means and lack of knowledge. For example, the poorer the family, the less milk, fruit, and vegetables are bought in proportion to the total amount spent for food. To produce a change, a long, slow, tedious process of teaching is necessary. If we hope to alter habits, we must furnish substitutes. This matter of changing habits, particularly such primal ones as food habits, is a very difficult one for adults. It is especially difficult among Jews. With the Jewish housewives, as with the continental Europeans, cooking is a tradition, an art. With the Anglo-Saxons, cooking has never been an art; American or English women will, therefore, take instructions gladly, while the Jewish housewife will smile at the suggestion that any young American woman can teach *her* how to cook.

However, knowing that Jewish mothers will do anything for their children—even listen to me—I invite them to attend a series of talks on how to keep their children well. Apart from the fact that every series opens with a statement by some one to the effect that she "would know what to cook if she only had the money with which to buy," I usually get their interest when I point out that medical practice has changed from that of simply curing people after they are ill, to that of preventing the illness. Thus we find vaccines which prevent epidemics from breaking out; we find antitoxins which ameliorate and lessen the terrors of the disease for those already infected. Preventive medicine is a new phase which has not yet reached its height, and preventive dietetics is an important part of it. Mothers realize the force of this. The lectures consist of a simple statement of the body's nutritional needs, and how they can be met. The reactions are very interesting. On one occasion, after I had recommended the use of certain foods, and the disuse of certain others, one woman said, "You know what's healthy, but we know what's good." I accepted the challenge and demonstrated food which they declared good when they tasted it. The meeting always breaks up with a feeling that, contrary to expectations, this was "cheap as well as good."

Work of Social Service Dietitian

You may be interested to know briefly of just what my work consists. There are two main divisions. The United Hebrew Charities has visitors under whose care our families come. I conduct a series of talks, conferences, and demonstrations for these visitors on the following:

Food facts.—Function, types, and needs.

Low priced menus.—Feeding of children, the sedentary, and aged; demonstrations.

Feeding of pregnant mothers.—Feeding of nursing mothers and infants.

The doctor and the diet.—Fluid, semi-fluid, liquid and soft, solid, and convalescent diet; regular hospital diet, diet in fevers and infections; demonstrations.

Diet in disease.—Anemia, tuberculosis, rheumatism, gout, stomach and intestinal disorders.

"The Visitor in the Kitchen." Series of talks.

Hygiene of the home.

Budget planning.

This is a sort of background, by means of which the visitors are expected to be better able to plan for their families, and, when special dietetic instruction is necessary they confer with me. If possible, I help them to aid the families, otherwise, either my assistant looks out for the family, or I myself do.

The second part of my program consists of conducting the series of lecture demonstrations already referred to above and meeting groups of our women, as well as those of the neighborhood, in various settlements and house-keeping centers. The mothers seem to be extremely interested in the meetings, and the attendance is very good. My method of procedure is to prepare the food and start the meal cooking before the arrival of the women. While it is cooking we talk about food values in general and the meal in the process of preparation, in particular. I devote part of each of these meetings to a discussion of:

- (1) General functions of food. Charts used.
- (2) Food during pregnancy, nursing, infant feeding. Luncheon, breakfast, and dinner requirements.
- (3) Food for child of pre-school age.
- (4) General hygiene. Meatless diet and similar subjects.
- (5) Hot weather meals.

The following is a set of menus:

MENU

BREAKFAST

Prunes	Oatmeal	Cocoa
Bread and Butter		
Cost for five portions.....		\$.35
Hominy	Raisins	Cocoa
Bread and Butter		
Cost for five portions.....		\$.35

LUNCHEON

Barley Vegetable Soup	Bread and Butter
Hominy Pudding	
Cost for five portions.....	\$.38
Fish and Potato Stew (Whiting \$0.06 per pound)	
Bread and Butter	Cocoa
Cost for five portions.....	\$.37

DINNER

Turkish Pilaf	Steamed Rice
Bread	Baked Apples with Raisins
Milk (for children)	Tea (for adults)
Cost for five portions.....	\$.50
Kidney Bean Stew with Rice	
Spinach	Brown Betty
	Cocoa
Bread and Butter	
Cost for five portions.....	\$.50

Vegetable Soup	Baked Potatoes
Stuffed Fish (Haddock)	Stewed Prunes
Milk (for children)	Tea (for adults)
Cost for five portions.....	\$.50

DINNER (Hot Weather)

Lettuce	Potato and Egg Salad
French Dressing	Bread and Butter
Chocolate Blanc Mange	Cocoa
Cost for five portions.....	\$.57
Lettuce Bisque	Fish, String Bean and Cucumber Salad
Bread and Butter	Stewed Apricots
Tea (for adults)	Milk (for children)
Cost for five portions.....	\$.57

SANDWICHES FOR PICNIC LUNCH

Peanut Butter Sandwich	
Cream Cheese with Cucumber, Whole Wheat Bread	
American cheese grated with mustard for flavor	
Egg, Onion, and Lettuce	
Sardine, onion, and lemon, whole wheat bread.	
Cost for five portions.....	\$.35

I plan that each day's ration shall include at least from two and a half to three quarts of milk. This, of course, is milk which is bought unbottled. Except for infant feeding, our families cannot afford bottled milk.

Gratifying Results of Work

The tales which the visitors report to me on the reactions of the different women are most interesting and gratifying. As an example of what I hear most often I will quote the report of one visitor. She told of a mother who goes to work—an extremely conscientious woman willing to go to any length in order that her children may be properly cared for. This woman told her that she had fed her children on corn-flakes for breakfast, salmon or delicatessen sandwiches for luncheon, and that in spite of the drain on her resources which this care entailed, the children were anemic and sickly. But since she has been attending the lectures with the "lady," she has been using oatmeal with a few raisins as suggested, peanut butter sandwiches, and has prepared the sort of lunches suggested, so that now she is not only able to save money, but her children are beginning to look rosy. One of the results I noticed is that mothers are beginning to prepare lunches for the children instead of giving them a few pennies and telling them to buy some things from the delicatessen. This, of course, is an improvement. Another improvement I have noticed is that, instead of giving children pennies with which to buy candy and cloy their appetites before meal time, they now give them raisins and dates after meals as desserts.

I realize fully that in spite of the fact that we are contemplating a much broader program next year, the work which we as an organization are able to do is only a drop in the bucket, compared with what ought to be done. As already indicated, we have been endeavoring to reach people who are not our clients, but for the most part our concern has, of necessity, been with those who are. I am sure that a great many might have been prevented from becoming our clients if they had known in the first place how to take care of their families properly. I have a positive conviction that a great many of those who are already our charges, may be rehabilitated through the sort of personal service which the Home Economics department is able to render. However, I feel very strongly that the community should see to it that all of its citizens receive the right kind of training. This may be given in the schools, the settlements, the clinics and by the relief societies, all of which should be working together along this line: the schools by training the children; the evening schools and settlements by running evening classes for girls who work during the day and who are about to be married, and also classes for young married women; and the clinic by doing preventive work with pregnant mothers, as well as with those who are already pathological diet subjects. In order to accomplish this end we have need of the right kind of people. Unfortunately there is a dearth of them. Just what the equipment of the right sort of person for this work should be is very difficult to say. It is certain that the social service home economics worker should have dietetic training of a very high order because, quite unlike her present position at the hospital where she follows physician's orders, as a social service dietitian she must often prescribe. She should have social case work training because, otherwise, she is likely to hamper others who are already working with a given family. She should have teaching ability, as all of her work is teaching. She should know something about nursing because she is often

the person who must bring first aid to the home. In fact, just what she should not know is very much more difficult to say than what she should know. It is certain that she should be a well trained, practical, sensible human being.

Aim of Social Service Dietitian

To summarize: The aim of a social service dietitian should be threefold: (1) To look after the health of the community family by working with the individual family. Jewish families can best be handled by a Jewish person who understands the Jewish problem. The work should be preventive as well as curative.

(2) To look after the economic conditions of the family by efficient management of the family budgets so as to include not only efficient buying, but also to prevent waste. The well planned family budget is like the budget of a great nation, a barometer of all its activities. It shows not only solvency or insolvency, but also all of the various human interests.

(3) To look after the esthetic aspect of the home in order that the mother's psychological reactions toward the humdrum drab existence of the slums may be a happier one.

NEWS NOTES OF DIETITIANS

Mrs. Lillian B. Moore has accepted the position of dietitian in the Monmouth Memorial Hospital, Long Branch, N. J.

Miss Ruth Shott has recently gone to the Texarkana Sanitarium, Texarkana, Tex., as dietitian. Miss Shott is pleased with the situation as she found it in this private sanitarium of about fifty beds.

Miss Mildred Taylor has been transferred from Walter Reed Hospital, Takoma Park, D. C., to Letterman General Hospital, San Francisco. Miss Taylor will be assistant to Miss Evaline Kerr, who has been dietitian at this military hospital for some time.

Miss Edna Rodaway has recently assumed the duties of dietitian at the Samaritan Hospital, Philadelphia. Miss Rodaway took two years' training at Battle Creek and had one year of practical work there. Later, she was with Dr. N. B. Potter, Memorial Laboratory and Clinic, Santa Barbara, Cal., for nine months, and at the time of accepting the position in Philadelphia, she was dietitian at the Garfield Park Hospital, Chicago.

Binghamton City Hospital, Binghamton, N.Y., has recently secured Miss Wilma Pierce to supervise the dietary department of that hospital, and Miss Dorothy Phillips of Pratt Institute to assist her. Miss Pierce graduated from Teacher's College and took student training with Miss Geraghty of New Haven Hospital. New supplies for the kitchen and new containers and carriers for food are being purchased to help facilitate the work of these young women.

Miss Louise Stevenson will continue the good work begun by Miss Pollock in the dietary department of the St. Louis City Hospital. Dr. Rolla Henry, superintendent of this hospital, appreciates what a good dietitian means to a hospital and is making readjustments which will enable Miss Stevenson to devote time and thought to important features of her work. Too often so much of a dietitian's attention is required for merely mechanical work or for details which might be handled by some one with less responsibility, that she has no opportunity to develop any real work in dietetics. Consequently, it is always gratifying to find a hospital in which this fact is

recognized. Miss Stevenson was for a time dietitian at the Baptist Memorial Hospital, Memphis, Tenn.

Miss Harriss of Massachusetts General Hospital is offering the following training to student dietitians: diet kitchen, practice in calculating and weighing diets for special diseases; supervision of cooking done by pupil nurses, except that for special cases; supervision of all diets sent from diet kitchen—during this time the student works in the laboratory making tests such as for sugar, acetons, and specific gravity, so that she is familiar with the needs of the various patients; main kitchen, administrative work, supervision of food in serving rooms in wards, both public and private; marketing; attending lectures by doctors. The course is five months in length, the student's board and laundry are furnished by the hospital, and the student provides her own room outside the institution.

Was it the diet or the kindness or both, which brought about the change of attitude in the following instance, which was reported from the Letterman General Hospital: An interested ward surgeon called at the diet kitchen to learn if special attention might be given to one of the boys in the prison ward. He was a young, promising boy of twenty, but knew only the worst side of life. This lad, handcuffed, his manner bold and aggressive, came to talk with the dietitian. He said no one could handle his case and that he was a strong man because he drank lots. The dietitian said she would gladly help him if he would help her—and eat the food which she prepared for him. He promised to do this. The special dishes pleased the boy and the next day when he came to the kitchen he acted ashamed of his handcuffs and hid his hands. He said, "Say, that buttermilk—'Bel-given', did you call it?—hit the spot, and the prune bread and jelly was real stuff." A week or so later he was examined for an operation. The surgeon explained how much better he was, and the boy replied with pride, "My chow is as good as the President's."

AMERICAN RED CROSS TO CONTINUE HOSPITAL PROGRAM

The American Red Cross has been requested to continue its hospital program, under which it will have charge of recreation for patients in all army general hospitals under the supervision of the hospital commanders, and to continue its system of Home Service in all hospitals, camps, posts, and other army stations. This was decided at a conference of the Education and Recreation Branch, War Plans Division of the General Staff of the Army, held at Louisville, Ky., on December 9-11, 1919. At the conference Red Cross officials participated and discussed with the army officers various problems concerning their work. The conference was called by Major General William G. Haan to discuss the new education and recreation program for the army, which was instituted last November.

The army representatives attending the conference were Maj. Gen. William G. Haan, director of the War Plans Division; Brig. Gen. Johnston Hagood, Commanding General, Camp Eustis, Md.; Col. Robert I. Rees, Chief of the Education and Recreation Branch; Lieut. Col. Jason S. Joy, Chief of Camp Activities; Col. Roger Fitch, Chief of Education; Col. Godwin Ordway, Chief of Moral Training; Dr. Robert C. Mann, chairman, Civilian Educational Advisory Board, War Plans Division; departmental education and recreation officers from all the major camps and posts, including general hospitals.

VENEREAL DISEASES AND THE HOSPITAL

Conducted by ALEC N. THOMSON, M.D.

Director, Department of Medical Activities

The American Social Hygiene Association, 105 W. Fortieth St.,
New York City

ST. LOUIS VENEREAL DISEASE CLINIC

The venereal disease clinic maintained by the Department of Public Welfare, Division of Health, St. Louis, Mo., was opened in February, 1918, as a prophylactic clinic only. Publicity was given to it by means of signs displayed in the toilets about the city. These signs were worded to make them look as much as possible like similar signs displayed by quack nostrums, which had for years been profitable sellers.

The results were so active and numerous from this display that within thirty days it became apparent that the department must undertake curative work for the checking of gonorrhea. In following out this purpose, Dr. Max C. Starkloff, health commissioner, called a meeting of the mayor, and police and judiciary officials, with a view to

soliciting their support. From this time on, women picked up on the streets, caught in raids on houses of ill fame or assignation hotels, were referred to the clinic for examination. Quarters were established for women found to be infected, and the clinic, which had opened as a prophylactic one only, developed into a permanent institution for the treatment of all venereal diseases.

Clinic Serves Host of People

From the opening day until the first of November, 1919, this clinic treated 4,086 men, who made 13,641 revisits. Of the total number treated, 1,208 were syphilis cases who only made 1,469 revisits. During the same period, 1,404 cases of gonorrhea were treated. As this is a public health clinic, the syphilis cases receive only arsphen-

The United States Government
ASSISTED BY
THE MISSOURI STATE BOARD OF HEALTH
AND ST. LOUIS HEALTH DEPARTMENT

HAS DECLARED WAR ON
VENEREAL DISEASES

SYPHILIS, POX, OLD RALE, GONORRHEA, CLAP,
RUNNING RANGE, CHORDEE AND STRICTURE ARE
ALL INCLUDED UNDER THIS TERM. ALL OF THESE DISEASES
CAN BE CURED

WHY TAKE CHANCES WITH A DISEASE WHICH
MAY CAUSE A LIFE-LONG SICKNESS.


IF YOU ARE UNABLE TO CONSULT A PRIVATE PHYSICIAN
FREE TREATMENT

CAN BE HAD BY APPLYING TO
ROOM 35, MUNICIPAL COURTS BUILDING,
14TH & MARKET STREETS

9:00 A. M. TO 10:00 P. M. DAILY
(SUNDAY EXCEPTED)

PAMPHLETS FOR YOUNG MEN, FOR OFFICIALS, FOR
BOYS, FOR PARENTS, FOR GIRLS, AND FOR EDUCA-
TORS WILL BE SENT TO ANY ADDRESS **FREE.**

ADDRESS STATE BOARD OF HEALTH, JEFFERSON CITY, MO.
DIVISION OF VENEREAL DISEASES



City of St. Louis.
Missouri.
DEPARTMENT OF PUBLIC WELFARE
DIVISION OF HEALTH

"606"

**"SYPHILIS", better known as "POX", has de-
stroyed, crippled and wrecked more lives than**

THE GREAT WAR NOW GOING ON.

Any sore on your privates may wreck your future.

No matter how trivial it may seem to you, don't undertake to treat yourself or accept the advice of friends or advertising doctors. If you cannot employ a reputable physician, the Health Department offers you, the most scientific advice and treatment **"606"**, in its purest form, administered by experts.

"FREE"

Call at Room 35 Municipal Courts Building, 14th and Market Sts.
Office hours: 9:30 A. M. to 5 P. M.
All interviews private and confidential.

At left: Sign used for advertising the venereal disease clinic in St. Louis. The clinic is financed by city, state, and federal funds, and is one of the recognized clinics under the supervision of the United States Public Health Service, Bureau of Venereal Disease. At right: One of the signs used for publicity when the venereal disease clinic was opened in St. Louis. These signs were worded to make them look as much as possible like similar signs displayed by quack sellers, which had for years been profitable sellers.



amine. They are referred for further treatment to Barnes Hospital and Barnard Skin and Cancer Clinic. Both these institutions send cases to the municipal clinic in order to take advantage of the free arsphenamine. As gonorrhea is a public health problem to the time of cure, full treatment was given to the 1,404 gonorrhea cases which resulted in a total of 11,434 revisits. The cases of chancroid admitted numbered 461, and the number of revisits made by them was 1,148. Cases coming under the jurisdiction of the city court made 1,013 visits for the purpose of physical examination.

From March 1, 1919, to December 1, 1919, 360 women were interned who had some form of venereal infection. They were given a total of 5,272 days' treatment.

Utilizes Space and Time

The clinic has been financed by city, state, and federal funds, and is one of the recognized clinics under the supervision of the United States Public Health Service, Bureau of Venereal Diseases. The personnel consists of three doctors and two female attendants. It is interesting to note that the clinic is open from 9 a.m. until 10 p.m. These are unusual hours. The modern dispensary and clinic is utilizing its quarters to the utmost, thus reducing overhead charges by having equipment in use as much of the time as possible.

Municipal Building Utilized

Follow-up work in this clinic is in charge of a woman who has police power. The quarters for the clinic are in the Municipal Courts Building. Those in charge believe that because of the location of the clinic the patients come more readily, as they do not advertise, by entering a public building, that they are attending a venereal disease clinic.

One of the outstanding features of this clinic is the placard wall exhibit displayed in the waiting rooms for men and women. These placards describe and illustrate



Placard wall displays are features of the men's waiting rooms in the venereal disease clinics maintained by the Department of Welfare in St. Louis. The clinics are held in the Municipal Court building.

gonorrhea and syphilis. They explain why treatment is necessary, why it takes time to cure, and how, if an adequate course of treatment is followed, the disabling complications can be prevented. It is believed that this method of placard display saves the staff much time in answering questions and also acts as an important factor in impressing upon the patient the necessity of continuing under observation until pronounced cured by the doctor. As an aid in the follow-up work, clinic educational methods have great value. This is not left to the wall display entirely. The staff treat the patients as human beings and

not merely as cases, realizing by experience that the co-operation of the patient is necessary for the success of the clinic.

ACT TO CONTROL VENEREAL DISEASE

The principal objects of the campaign for nation-wide control of venereal diseases, says Charles V. Herdliska in the *Public Health Reports* are to enlarge and improve courses in the diagnosis and treatment of venereal diseases so as to include laboratory and clinical facilities in colleges where these courses are being taught, to have such courses introduced as major courses in colleges where they are not being taught in order that students may be equipped to handle the diseases when they begin to practice, and to offer special short courses in the latest scientific methods for men who are now practising. While the program applies primarily to medical schools and colleges, the plan is for all schools of dentistry, pharmacy, and the like to give training in the pathology of venereal disease.

Preliminary to the presentation of this program to the medical and allied schools of the country, conferences were held at the universities in Washington, D. C., including the professional schools of Georgetown, George Washington, and Howard Universities. At these conferences there were addresses on the sanitary attack of venereal diseases; the better teaching of venereal diseases in

schools, clinics, and hospitals; the place of venereal diseases in medical, dental, and pharmaceutical schools, in hospitals, clinics, and training schools for nurses; the importance of a proper knowledge of venereal diseases, not only to physicians, but to dentists, druggists, and nurses, and to college physical directors. Social hygiene films were shown and resolutions were adopted.

The program of these conferences was suggested as the form of procedure in approximately 350 schools over the United States, and favorable replies were received from all. An attempt is now being made to secure as early as possible the establishment in rural communities of extension courses for physicians and dentists who can not leave their work for post-graduate or special courses.

CREATING A BETTER ATMOSPHERE IN THE VENEREAL DISEASE CLINIC

What can I do in my venereal disease clinic to maintain the interest of my patient? In answering this question one must of necessity take up all angles of clinic management. No clinic can maintain the interest of the patient unless it renders service. No clinic can render service unless it has adequate facilities for maintaining its histories in a readable form right up to the minute of the patient's last visit. In order to have everything recorded on the history that should appear, the clinic must of necessity be properly equipped as to instruments, laboratory facilities, and personnel. Furthermore, in delivering service to the patient it becomes necessary to provide him with inspiration and, when needed, stimulation to the end that he will keep up his attendance until pronounced cured after adequate tests are made.

The social service and follow-up work act as the stimu-

lant. The "atmosphere" of the clinic is the inspiration. This atmosphere is very largely the result of a combination of circumstances and conditions—the cheerfulness of the personnel; the cleanliness and other physical characteristics of the clinic itself; the total absence of a "holier-than-thou" attitude on the part of the physician and nurse toward the patient; the evident scientific, careful work being done, and the exhibition and use of illustrative material in order to show the patient what is the matter with him and why.

Things for the Clinic Wall

For years various clinics throughout the country have displayed upon their walls numerous pictures, charts, printed signs, and the like. This material is sometimes in the waiting room, the treatment room, or the history room. At the Brooklyn Hospital for years the walls of the waiting rooms have carried a rather extensive display.

In an old description of the Brooklyn Hospital Dispensary published in 1916 the statement is made that the patient must be inoculated with the "stick-to-it-until-you-are-well" idea. This demands constant advice and encouragement. The staff must live the idea and the walls must talk the idea. Variety is essential. Change draws attention. While the basic matter is always the same, the presentation varies. Variations in shape, color, type, and wording are considered of value. This is well illustrated by the photographs shown of the clinic waiting room.

A New Set of Clinic Placards

The American Social Hygiene Association, in order to meet the demand for material to be posted in clinics, has devised a series of eight placards based upon the work



At the Brooklyn Hospital for years the walls of the waiting rooms have carried an extensive display of illustrative material on the subject of venereal diseases.

WHAT IS THE CAUSE OF VENEREAL DISEASE?



The Germ of Gonorrhea



The Germ of Syphilis

Gonorrhea is caused by a living germ called gonococcus.

When the germ gets a foothold on the lining of the sex organs (male or female) it grows rapidly and causes inflammation.

Syphilis is caused by a germ called spirochaeta pallida.

Entering a cut or scratch anywhere, it soon makes its way into the blood.

To cure these diseases completely it is necessary to kill all the germs. This is difficult and requires patience and faithful treatment.

ARE METHODS OF DIAGNOSING VENEREAL DISEASE KNOWN?



A LABORATORY FOR EXAMINING BLOOD

Yes—In addition to a study of the patient's symptoms, the doctor makes use of the microscope to find the germ.

He also uses, when necessary, special instruments for examining the sex organs.

Frequently blood examinations and other laboratory tests are made.

Only a competent doctor, equipped with modern laboratory facilities can make these examinations.

WHY IS THOROUGH TREATMENT NECESSARY?



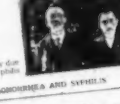
Random, the result of Gonorrhea



Gonorrhea



Syphilis



Insanity due to Syphilis

AVOIDABLE COMPLICATIONS OF GONORRHEA AND SYPHILIS

Unless completely cured, gonorrhea may cause kidney disease, heart disease, rheumatism, sterility (in men or women) and other serious complications.

Uncured syphilis may linger in the body for years causing destruction to muscles, bones, nerves or brain. Locomotor Ataxia, paresis and rupture of the large arteries may result.

Both gonorrhea and syphilis may be transmitted to husband or wife. Syphilis may be transmitted to the children.

WHEN IS IT SAFE FOR ONE WHO HAS HAD GONORRHEA OR SYPHILIS TO MARRY?



A Few Years From Now You May Enjoy This—



—You Need Not Suffer This

One who has gonorrhea or syphilis should not marry until assured by the doctor that it is safe to do so.

Unless one is completely cured, he may render his life partner an invalid. Syphilis, if not completely cured may be passed on to the children.

Only a reputable doctor who makes use of modern laboratory tests is competent to make these examinations and give advice.

WHY ARE ADVERTISED REMEDIES AND DOCTORS WHO ADVERTISE DANGEROUS?



Because the man who is his own doctor has a fool for a patient.

Because gonorrhea and syphilis are not easily cured. Time, patience and skill are necessary.

Because doctors who advertise are generally more interested in your money than in your life or health.

Because many of these remedies only remove outward signs, making one think he is cured. Years later the serious results of gonorrhea or syphilis may show up suddenly.

HOW CAN THE PATIENT ASSIST THE DOCTOR?



STICK WITH THE SHIP YOU WILL MAKE THE PORT OF GOOD HEALTH

1. By coming to the clinic promptly and regularly.
2. By obeying implicitly every direction the doctor may give.
3. By keeping cheerful and patient, living a happy, normal life.

Follow these rules, don't get discouraged and you will get well.

WHAT CAN YOU DO TO SAVE OTHERS FROM VENEREAL DISEASE?

1. Get well—You will then not spread the disease to others.
2. Back up the Health Department in its fight to control Venereal Disease.
3. Instruct your children in the facts of sex in a wholesome way. Don't let them get this information from unclean sources.
4. Spread information about the dangers of prostitution and the seriousness of Venereal Disease.
5. Aid in the campaign to combat commercialized prostitution.
6. See that wholesome recreation is provided for your community.

If you know of anyone who needs treatment, send him to the clinic.

EDUCATIONAL PAMPHLETS

The nurse will be glad to supply you with copies of pamphlets displayed below. Please ask for only those which you can use or distribute.



done in clinics throughout the country. In its announcement of this placard exhibit the Association says:

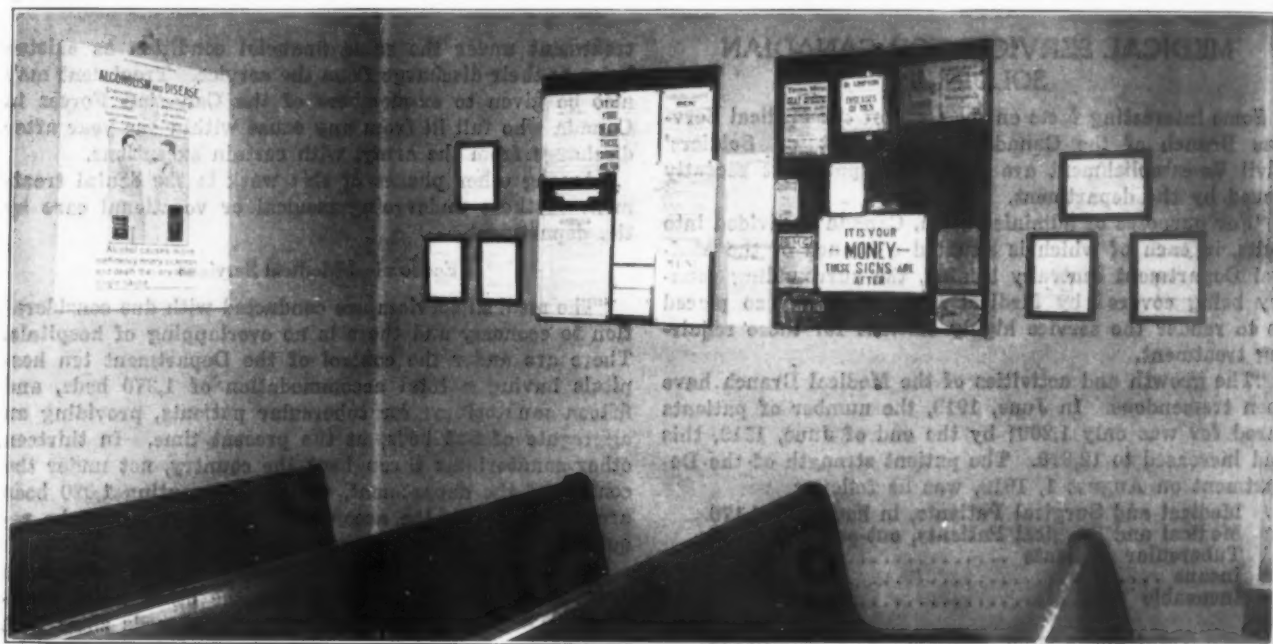
"The modern dispensary for the treatment of venereal disease does more than provide for the physical needs of the patient,—it also serves as a center for the dissemination of knowledge concerning the prevention and cure of venereal diseases.

"This set of eight placards is intended to be displayed on the walls of the waiting room of the dispensary. Each placard measures 10 by 14 inches, is neatly designed, and printed in colors. The general tone is encouraging and stimulating, great care having been exercised in their production not to frighten the patient unduly, but rather

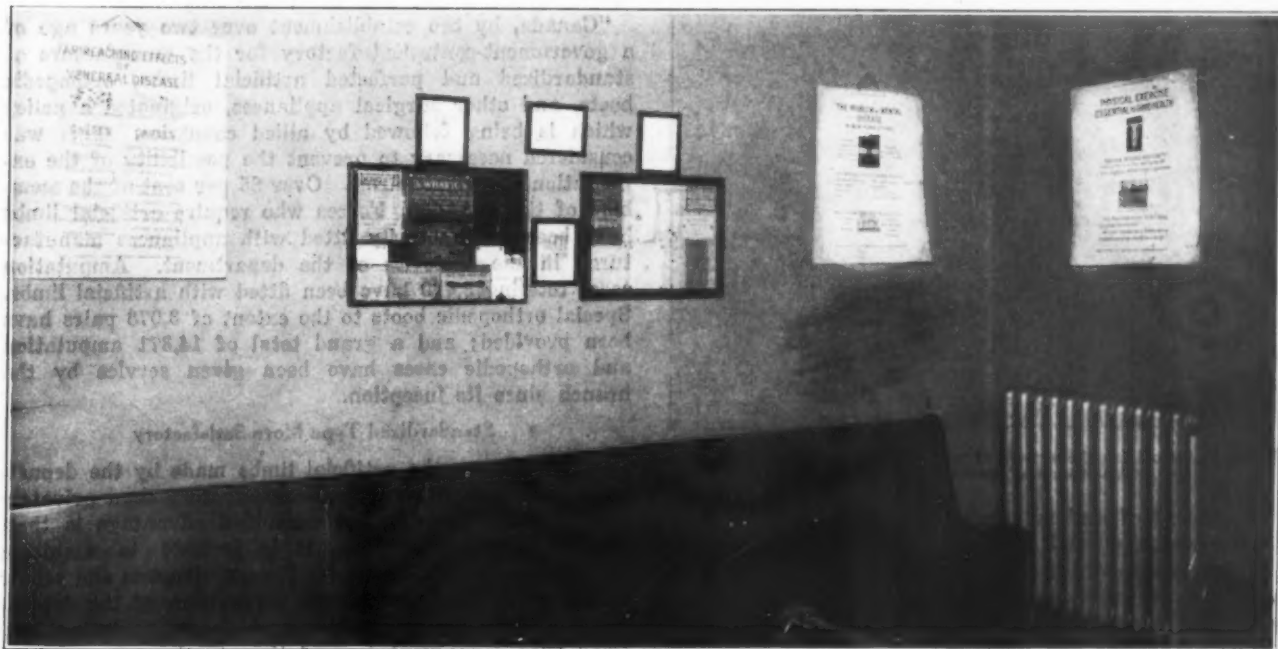
to explain the importance of continued and faithful treatment. One of the placards is so arranged that pamphlets which a dispensary may wish to distribute may be attractively displayed on it."

JUDGE NOT

In men whom men condemn as ill,
I find so much of goodness still;
In men whom men pronounce divine,
I find so much of sin and blot,
I hesitate to draw a line
Between the two, where God has not.
—Joaquin Miller.



The walls of the clinic waiting room should contain placards, pictures, and charts for the dissemination of knowledge concerning the prevention and cure of venereal diseases.



Variety is essential in the charts and placards hung on the walls of the venereal disease clinic. Change draws attention. Variations in shape, color, type, and wording are considered of value.

OCCUPATIONAL THERAPY, VOCATIONAL RE-EDUCATION AND INDUSTRIAL REHABILITATION

Conducted by DOUGLAS C. MCMURTRIE, Director Red Cross Institute for
Crippled and Disabled Men and MRS. CARL HENRY DAVIS, Adviser
in Occupational Therapy, Milwaukee-Downer College.

MEDICAL SERVICES FOR CANADIAN SOLDIERS

Some interesting facts on the work of the Medical Services Branch of the Canadian Department of Soldiers' Civil Re-establishment are given in a pamphlet recently issued by the department. To quote:

"For purposes of administration, Canada is divided into units, in each of which is situated a branch of the Medical Department centrally located, the surrounding country being covered by Medical Representatives so placed as to render the service highly efficient for those requiring treatment.

"The growth and activities of the Medical Branch have been tremendous. In June, 1918, the number of patients cared for was only 1,200; by the end of June, 1919, this had increased to 12,870. The patient strength of the Department on August 1, 1919, was as follows:

Medical and Surgical Patients, in hospital.	4,176
Medical and Surgical Patients, out-patients	6,353
Tubercular Patients	1,787
Insane	737
Incurable	85

Total under treatment.....13,138

"These figures represent only a small portion of the

treatment under the same financial condition as existed prior to their discharge from the service. Treatment may also be given to ex-members of the Canadian Forces in Canada who fall ill from any cause within one year after discharge from the army, with certain exceptions.

"Among other phases of this work is the dental treatment of those undergoing medical or vocational care by the department.

Economical Medical Services

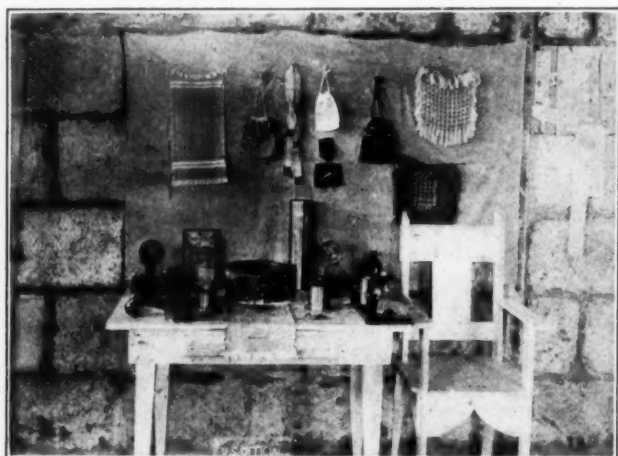
"The medical services are conducted with due consideration to economy and there is no overlapping of hospitals. There are under the control of the Department ten hospitals having a total accommodation of 1,370 beds, and fifteen sanatoriums for tubercular patients, providing an aggregate of 923 beds, at the present time. In thirteen other sanatoriums throughout the country, not under the control of the department, wards representing 1,020 beds are set apart for the accommodation of patients who require treatment for tuberculosis.

"The advantages of the Canadian system have been recognized and closely studied by the other allied countries—a compliment in itself. Actual records show that over 75 per cent of those ex-members of the Forces who have fallen a prey to the disease and who have been treated in the sanatoriums of this department are able to resume useful occupations in civil life.

"Canada, by the establishment over two years ago of a government-controlled factory for the manufacture of standardized and perfected artificial limbs, orthopedic boots, and other surgical appliances, originated a policy which is being followed by allied countries. This was considered necessary to prevent the possibility of the exploitation by private firms. Over 85 per cent of the members of the Canadian Forces who require artificial limbs have been satisfactorily fitted with appliances manufactured in the factories of the department. Amputation cases totaling 3,990 have been fitted with artificial limbs. Special orthopedic boots to the extent of 3,076 pairs have been provided; and a grand total of 14,371 amputation and orthopedic cases have been given service by the branch since its inception.

Standardized Type More Satisfactory

"Not only are the artificial limbs made by the department less expensive and more satisfactory than privately manufactured articles, but an added advantage is that, with a standardized type, it is possible to maintain throughout Canada depots for the maintenance and repair of these appliances under the supervision of the department. There are now twelve such depots obviating long trips with consequent loss of time to those ex-members of the Forces who require adjustment or repair of the appliances which have been furnished to them.



United States official photograph of work done in occupational therapy departments of government hospitals.

vast amount of medical work—including medical reports, expert advice, special examinations, interviews, personal and otherwise—which of necessity follows when dealing with such a large number of men and their relatives scattered over this great Dominion, and having many varied viewpoints and requests.

"Men who have a recurrence of illness on account of war disabilities may return to the department for free

"A progressive experimental branch is constantly engaged in seeking and devising new designs, and improving existing appliances.

"An outside nursing service is in operation for the purpose of tracing up such cases as have been discharged from the hospitals, with a view to determining whether home treatment which has been prescribed is being properly carried out, and that the conditions under which the patients are living are conducive to their improvement.

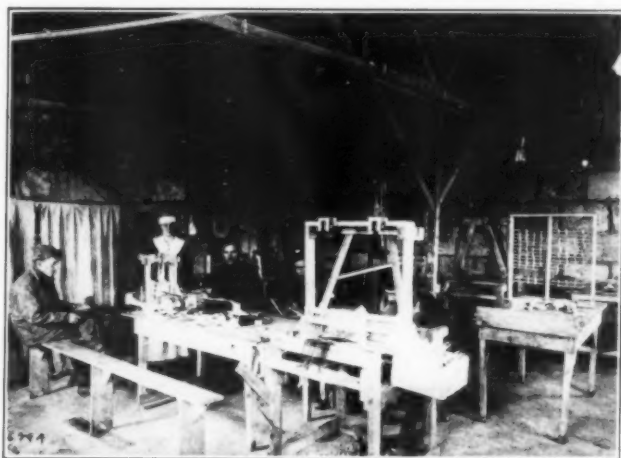
"The Medical Branch of the Department has had a gigantic work and has effectively grappled with it; and when the ex-soldier finally regains health and strength as far as it is possible for modern science to restore it, he will once more be in a position to resume responsible citizenship with all its duties and privileges."

A WELSH HOSPITAL FOR LIMBLESS MEN

A hospital to provide crippled soldiers and sailors with artificial limbs, to train them in their use, and to maintain the appliances in good working order as long as the men live has been presented to the Welsh nation as a memorial to the men who died in the great war. As long as the war demands continue, the hospital will be reserved for soldiers and sailors, but as they cease to fill it, its services will be used for the benefit of men crippled by accidents—in mines, on docks or railroads, in steel works, iron works, factories, or on farms. It will thus be a permanent as well as a fitting memorial.

The hospital is named The Prince of Wales Hospital for Limbless Soldiers and Sailors, and is situated at Cardiff. It consists of three houses—the main building with accommodations for fifty-three men, an officers' house containing twelve beds, and a house for the staff. There are also workshops where the artificial limbs are made, and a garden which is useful as well as ornamental.

No man is discharged from the hospital until his limb is thoroughly satisfactory to him and he has learned to use it. The methods by which men are taught to walk are most ingenious.



Disabled Yanks display aptitude for the vocations taught them by Uncle Sam.

To quote from a booklet recently issued describing the hospital: "When a man first wears his new leg he is taken to the parade hall, a long room with terrazzo floor and two sets of parallel bars to suit men of different heights. The bars give him confidence, and at the far end are mirrors so that he can see for himself any error he may make in his first attempt to walk, and be shown by an instructor how to correct it.

"In the case of a man who has been so unfortunate as to lose both legs, the problem is naturally more difficult to solve, and a longer preliminary stage is necessary to restore his confidence in himself. Hitherto, these poor fellows, in order to get into their artificial legs, have had to depend on two people to lift and steady them. This difficulty has been overcome by a special appliance consisting of pulleys and tackle, and 'aerial transporter



Occupational therapy work-room in an army hospital.

crutch,' by which the man can lift himself from his wheel chair into his artificial limbs and allow just so much of his weight to rest upon them as he feels he can bear. Gradually, guided by his own sensations, he bears more and more weight until he feels he can stand, and finally begins to walk. The man who has lost only one leg, of course, makes more rapid progress, and from the parade hall with its parallel bars soon passes on to practise walking in the garden."

The garden, as an adjunct of a limb-fitting hospital, is unique. Instead of the usual graveled paths and smooth lanes it is laid out as a miniature "wild Wales," with rough uneven paths and steep climbs. This because practice in walking on smooth level ground has been found to be ill preparation for the actual conditions of the Welsh countryside.

The department for artificial arms is equipped for measuring the lifting or pushing power of appliances and the breaking strain of the materials used in their construction. One of the arms supplied is the invention of an armless collier, who has used it successfully for over twenty years. This man also superintends the men's training, which is carried on in the garden and in workshops, and is designed to fit them to go back into Welsh industries. There are pits for them to practice loading coarse sand and gravel, a miniature coal mine, and shops for steel workers, carpenters, glass blowers, and leather workers.

A statement in the above-mentioned booklet gives the number of artificial legs fitted and made at the hospital from May 7, 1917, to April 30, 1918, as 302 legs, including nine double amputation cases, and 125 arms, including one double amputation case.

The office of the Surgeon General announces that reports upon activities for educational service at fifteen Army general hospitals and one base hospital for September show that of 2,399 patients who received a surgeon's certificate of disability, 2,269 were able to resume their old occupations or were not in need of retraining, and only 130 were designated as unfit for their old occupation.

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS

15 Fort Washington Avenue, New York City

SUCCESS IN HEALTH WORK IN INDUSTRY DEPENDS UPON PURPOSE

The attitude of laboring men and women toward much that is done to safeguard their health in industry is well expressed by a little incident that happened in a large New York factory.

The director of welfare was explaining to a group of workers the value of the proposed physical examinations which he was about to establish. "Yes," exclaimed one of the workers in contempt, standing up and pointing to a horse hitched to a truck outside. "Do you see that old plug out there? The driver just put a nice, warm blanket over his back, didn't he? Why did the driver put a nice, warm blanket over the old plug's back? Because he *loved* him? No, of course, not because he *loved* him. Why then? Because he wanted to *drive* him! What we working people want is for you to get off our backs, take the blinders off our eyes, and stop *driving* us. In fact we'd like to do a little driving ourselves."

The same idea underlies the resistance of the workers to the introduction of efficiency methods, and also explains the alarming tendency to reduce output. Many workers have lost confidence in a scheme of things which has so often made it possible for employers to exploit them, doling out for their "welfare" only so much as they felt would benefit the stockholders.

By bringing in the national and state health organizations as well as employers as representatives, the Massachusetts Committee on Health in Industry has taken a step which will help to broaden the *purpose* of health work in industry. Another step forward would be to include the representatives of labor upon such a

committee, and not representatives selected by employers, but by the unions. They would report back to their people what was being done, and would act as a most powerful check upon selfish exploitation. They would also serve as a tremendous educational force, for the working people do not realize, any more than the employers yet realize, how much needs to be done, and can be done, in improving health conditions in industry.

STATE-WIDE COOPERATION IN INDUSTRIAL HEALTH EDUCATION

By MRS. ANNA M. STAEBLER, R.N., Executive Secretary, Massachusetts Committee on Health in Industry, Boston, Mass.

The Massachusetts Committee on Health in Industry was organized in 1915, its chief object being the conservation of the health of workers by means of establishing nursing service and medical supervision in places of work. The personnel of the committee represents agencies interested in measures for improving the health of the people. Among the organizations represented are



A Public Health nurse is warmly greeted at the home of an employee of the West Boylston Mills, Easthampton, Mass. The nurse is employed by this company to help in the homes of the employees.



Dental clinic, Hood Rubber Company, Watertown, Mass.

the State Department of Health, the Boston Tuberculosis Association, the Massachusetts Tuberculosis League, the National Organization for Public Health Nursing, Associated Industries of Massachusetts, Massachusetts Child Labor Committee, Massachusetts Consumers' League, and the State Board of Labor and Industries. The work of the committee is state-wide, although in the beginning the territory was confined to Greater Boston. The secretary is a registered nurse with public health training and several years of executive and organization experience.

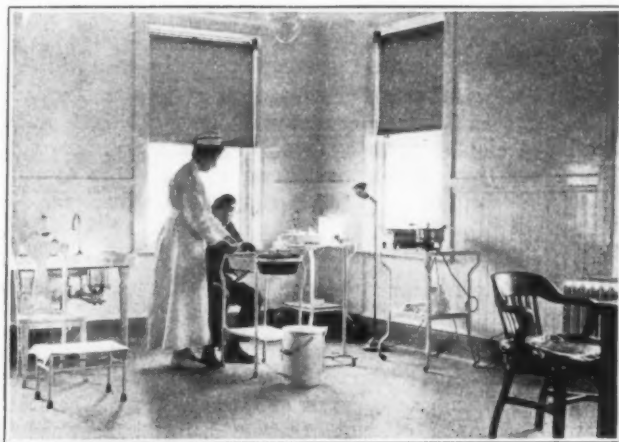
At first the employers were interviewed individually, and told of the value of nursing service in the factory.

Results came slowly, and the first year was discouraging. The second year was more encouraging, and the work has developed steadily. There are approximately five times as many nurses employed by corporations in Massachusetts as there were in 1915.

Less time is spent now in individual interviews. Many requests come for the secretary to address Manufacturers' Committees, Boards of Trade, and Foremen's Meetings. By thus presenting the subject to a group of interested people time and effort are saved.

We always work with a local health agency. Cooperation is readily given by the Visiting Nurse Associations. Their help is valuable, especially in starting hourly nursing service in the small local plants. They recognize this opportunity of doing additional preventive nursing in their community. The industrial nurse deals with a group of people which hitherto had not been reached by the Visiting Nurse Association unless they were called to the homes to give bedside care. The associations are helpful also in obtaining proper introduction to local employers for the secretary, and often show their interest by accompanying her to the large plants. Many requests are received from industrial organizations for addresses on "Industrial Nursing" or "Health in Industry," to be given at their annual or monthly meetings.

The following plans for nursing service have been worked out by us to meet the needs of any sized factory in either a rural community or a large city.



Nurse on duty in first-aid room, West Boylston Mills, Easthampton, Mass.

(1) Full time nursing. This means that a nurse spends her entire time in the employ of one firm. She is in its pay and under its direction.

(2) Group service. This meets the needs of a few small or medium sized adjacent factories which share in the time and expense of one nurse. This service is usually arranged for in either of the following ways: (a) A Visiting Nurse Association sends one or more of its nurses on this duty. The firms pay the association and it, in turn, pays the nurse. (b) A committee of representatives from the various interested firms has entire charge of directing and paying the nurse.

Both forms of service have worked out well, although form (a) is more common.

(3) Hourly service. The Visiting Nurse Association sends its nurse to serve employers in their factories or in the homes of their people. The service in the factory is paid for on the hourly basis. In the home it is paid for either on the hourly basis or on the basis of a certain

amount per visit. In factories where only first aid workers are employed, such service should be supervised and supplemented by a public health nurse, who visits the factory daily, although sometimes for only one hour.

In the various forms of industrial nursing which have been mentioned, the importance of follow-up visits to the homes of the employees should be impressed upon the employer. The nurse may always go where there is sickness or trouble and be assured of a welcome. This part of the service gives the nurse unlimited opportunities for teaching and demonstrating the principles of public health.

Our committee has presented this work to employers and the general public in various ways, through newspapers, trade journals, and circulars. We displayed an exhibit throughout the state, especially in the industrial towns and centers, for about three years. The exhibit



First aid room, Hood Rubber Company, Watertown, Mass.

consists of seventy-five uniformly mounted photographs, portraying various phases of industrial hygiene and betterment, including, of course, a group on nursing and medical service. Many of the pictures are comparative, showing good and bad working conditions.

Many noon health talks have been given in factories. Requests are received year after year from the same factories for these talks to be repeated. Occasionally they lead to an awakening on the part of the employer for nursing supervision of his employees. We are glad to help him whether he employs 100 or 1,000.

Education of the employer regarding the value of industrial nursing has resulted in a different attitude from that taken by the employer a few years ago. Five years ago an employer would say, "All we need here is a motherly, middle-aged woman." Now he will say, "We have decided to take on this service, and want to do it right. Will you send us a good nurse who knows her job? Furthermore, we want our medical department properly equipped. Can you help us on that?"

In our office we keep a list of carefully chosen nurses for industrial work. We give decided preference to those who have had training or good experience in public health nursing. Such training includes preventive nursing and social service. Prevention counts for economy, and this is what the employer wants. After a nurse is placed we hold no official connection, but are ready to help either nurse or employer in an advisory way.

Our office has quite naturally grown into a bureau on industrial nursing for the benefit of nurses and employers. Inquiries on various phases of industrial nursing and

other forms of betterment are received from coast to coast, and from the Gulf to Canada. Many nurses and others interested come for advice. In fact the office end of the work has grown so heavy that temporary assistance has been required, and we anticipate employing a permanent assistant largely for field work.

Our secretary was instrumental in 1915 in arousing interest which resulted in the organization of the New England Industrial Nurses' Association, the first organization of its kind. The membership has grown rapidly as nurses have appreciated the opportunity of meeting in order to discuss their problems, work out standards, and hear speakers of authority on subjects of help and educational value to them. At present there are nearly 200 members enrolled.

COMMITTEE ON HEALTH IN INDUSTRY ISSUES CIRCULAR

The following circular is reprinted as a suggestion to any one who may be interested in organizing similar committees in their own states. The titles of the committee members indicate the manner in which health agencies have cooperated in this work, representatives of government agencies, national and state health organizations, and employers all being represented. The text of the circular is a brief, well worded argument for more industrial nursing. The cover design of the little folder is reproduced on this page.

Does It Pay to Employ an Industrial Nurse?

Yes, because:—

1. She gives first aid in case of injury, thereby preventing infection and shortening the period of disability.
2. She cares for minor ailments, thereby enabling the employees to continue work.
3. She is on the alert to prevent the introduction and spread of contagious diseases through the plant.
4. She prevents illness by giving instruction in ways of keeping well.
5. She advises regarding correction of physical defects.
6. She visits and arranges for the care of those absent because of illness, thereby enabling an earlier return to work. She helps in case of family illness or trouble, thereby relieving the mind of the worried employee and enabling him to give his undivided attention to his work.
7. She teaches the rules of hygiene and sanitation. She advocates suitable precautions in the dangerous trades.
8. She is at all times a friend in need and interprets to the employee the plans of the employer for the establishment of various forms of industrial betterment.

Does the Industrial Nurse Act Under the Direction of a Physician?

Yes, the physician, attending the plant daily or even only once a week, gives directions which a trained nurse can intelligently follow between his visits.

What Are the Qualifications of an Industrial Nurse?

She should have a personality which gains and holds confidence, quick and sound judgment, tact, and optimism. In addition to being a registered nurse, she should, if possible, have had a post-graduate course in Public Health Nursing. Such a course insures knowledge of the preventive side of her work, which counts so largely in keeping employees well and on their jobs.

How May Nursing Service Be Arranged for the Small Plant?

Arrangements may be satisfactorily made in most communities for a part time nursing service. Ask the committee for a plan to meet your needs.

HEALTH IS THE BASIS OF EFFICIENCY



Do Insurance Companies Help to Equip First Aid Rooms?

Yes; ask your insurance company what it will do in the way of equipment and reduction in your rating.

Is Factory Nursing Service a Business Proposition?

Yes; the average employee in your plant is absent more than eight days a year from sickness, accident, and other reasons, for which sickness is given as an excuse. A reduction of more than 40 per cent in this lost time can be attained through the work of the trained nurse in the factory and in the home of the employee. Take your pencil and figure it out; then let the committee hear from you.

Where Can a Good Industrial Nurse Be Obtained?

The Massachusetts Committee on Health in Industry, 3 Joy Street, Boston, can supply one. It has helped scores of employers to establish a nursing service which has never been discontinued, and in a number of cases has been enlarged. No fee is charged to either employer or nurse.

What Is the Massachusetts Committee on Health in Industry?

The Committee represents agencies interested in measures for the conservation of health. It was organized in 1915 and, as a result of its activity, the health of many thousands of employees is being supervised by nursing and medical care in the places of work and in the homes.

The Massachusetts Committee on Health in Industry of the Boston Association for the Relief and Control of Tuberculosis and of the Massachusetts Tuberculosis League consists of: James J. Minot, M.D., chairman; Miss Mary Beard, R.N., President National Organization for Public Health Nursing; Miss Bernice M. Cannon, Educational Director Wm. Filene's Sons Co.; Merrill E. Champion, M.D., Massachusetts State Department of Public Health; Edward M. Coffin, Associated Industries of Massachusetts; Richard K. Conant, Secretary Massachusetts Child Labor Committee; Eugene R. Kelley, M.D., Commissioner State Department of Public Health; Edward O. Otis, M.D., Tufts College Medical School; Mrs. Mabel G. Smith, Executive Secretary Cambridge Anti-Tuberculosis Association; Miss Anne H. Strong, R.N., Director School for Public Health Nursing, Simmons College; Miss Mary C. Wiggin, Executive Secretary Massachusetts Consumers' League; Arthur V. Woodworth, Advisory Committee, Boston School Committee; Wade Wright, M.D., Deputy Commissioner (Medical) State Board of Labor and Industries.

FOREIGN CORRESPONDENCE

POSITION OF BRITISH HOSPITALS

(From Our London Correspondent)

London, Dec. 15, 1919.

Reconstruction is the order of the day in Great Britain and the hospitals will be involved in the changes that are taking place in the practice of medicine. A crisis has almost been reached with regard to the hospitals in every part of the country. Practically all the institutions of this kind are dependent on charity for support and even before the war many of them had considerable difficulty in making both ends meet. The war, of course, threw a tremendous strain on them, viewed from every angle, and perhaps especially from the financial aspect. Those which formerly were fairly prosperous are now in straits for money, while those which relied almost wholly on the public for maintenance are in a very bad way indeed. When St. Bartholomew's Hospital, the richest and oldest in the Kingdom, with an endowment derived from land and house property of more than \$500,000 a year, is compelled to close the convalescent home, to run into debt at the bank, and to issue a public appeal that if a large sum is not raised forthwith, that further and extensive economies will have to be practised, then it is clearly evident that those institutions which have small or no incomes, must be in a very much worse position.

Middlesex Hospital has sent out an appeal for \$1,000,000. The first public function that the Prince of Wales undertook after his return from America was to attend a dinner to solicit pecuniary aid for voluntary medical hospitals, in general, and for the Middlesex Hospital, in particular. A few evenings later he attended a dinner held to raise funds for another London Hospital, the Great Northern, and on the following evening Prince Arthur of Connaught presided at a dinner to plead for assistance for King's College Hospital. And so it goes. The hospital accommodations throughout England, Wales, and Scotland are inadequate and steady means of support is lacking.

To give an example of the situation of the big London hospital at the present time, the following account of the scope of the work of King's College Hospital and its financial plight will suffice. It represents the situation of them all in a greater or less degree. More than 1,000,000 people reside in the district served by King's College Hospital, and the extent to which they take advantage of the institution is shown by the fact that during the war period 115,199 out-patients and 12,692 in-patients passed through the civil side. In addition, one part of the buildings was devoted exclusively to wounded soldiers, and 30,923 officers and men were treated there.

At the present time the average number of weekly attendances in the out-patient department reaches 3,500, while the dangers of the streets and other accidents lead

to a daily average of from forty-five to fifty casualties which receive attention. It goes without saying that to carry on efficiently such work calls for a good deal of money. It is said to cost more than ten dollars to run the hospital for a quarter of an hour. There are 900 cases awaiting admission and the wards vacated recently by military patients cannot be used for want of funds. Other activities incident to a great hospital are hampered by want of funds. The expenditure amounts annually to \$400,000 while the income does not exceed \$100,000. This leaves a balance of \$300,000 to be raised to meet the outgoings. In addition to the need for raising an income of \$300,000, King's College Hospital has incurred a building debt of \$250,000. The state of affairs existing at King's College Hospital is typical of similar institutions in all parts of the land. Some are better off, but more are worse off.

Remedies for Present Conditions

But before entering upon the very wide and difficult subject, the remedy for the situation, it may be well to emphasize that the hospitals of Great Britain are notoriously inadequate for the accommodation of the applicants. For the most part they were built very many years ago with no regard for the needs of an increasing population. The consequence is that in some districts the accommodation is more than ample while in other districts, and this is usually the case, the accommodation is not nearly sufficient. The masses of Great Britain appear to have changed their attitude towards the hospitals. At one time the ordinary British workman and members of the working class generally were very distrustful, not to say suspicious of hospitals. They regarded them as only slightly better than the workhouses which they abhorred, and kept out of them as much as possible. Now they have made a complete *volte-face* and clamor for admittance. The truth is, they have come to realize that all that modern science can do for them in the way of diagnosis and treatment is done in the general hospitals. Then it must not only be taken into account that hospital accommodations are extremely inadequate and that hospitals are very frequently most inconveniently situated, but also that many more persons are desirous of hospital treatment than was formerly the case. There is a long waiting list at every hospital. What is to be done, if hospitals are inadequate for the purpose for which they were established and if even those which are in existence have great difficulty in raising funds to carry on? At first thought it appears that the reformation and reconstruction of the hospitals, or rather, hospital system, are among the main reasons for the creation of a Ministry of Health, and the idea is at once jumped at that British hospitals shall be state controlled. On second thought, however, this view of the matter is recognized to require

much revision; "make haste slowly" in this direction is the motto of many who have made a special study of the subject.

In the first instance it is quite obvious that the members of the Ministry of Health have their hands more than full. They have pledged themselves to solve the housing problem and this question alone will occupy their earnest attention for a long time to come. They have no wish to be worried with another vast problem until some decision has been come to which can be carried into effect with regard to the provision of dwelling houses. Moreover, there is no general conviction that state controlled hospitals are desirable or are likely to meet with the approval of the British public. In fact, sentiment and tradition are deeply imbedded in the breast of the Britisher. Conservatism is bred in him. Prince Arthur of Connaught, in his speech at the King's College Hospital dinner, referred to previously, exactly expressed the opinions of the "man in the street" when he said that "supported by voluntary contributions" has been for generations the proud boast of Great Britain, and it would be a bad day, not only for the home country, but for the whole of the Empire, were that superscription on many of our great hospitals relegated to the scrap heap.

General Hospital System Inadequate

Sir Henry Burdett, editor of the *Hospital*, is one of the strongest supporters of the voluntary system and deprecates the cry of some whom he terms irresponsible that the voluntary system is doomed and suggesting that the voluntary hospitals must be put on the rates. He declares that such utterances will not bear examination on the facts and are contrary to the truth. Such statements in the present juncture are mischievous because they deter people from giving money to the hospitals or leaving it to them by will. He thinks, therefore, that a definite statement from the Government to the effect that the state has no intention, or at any rate, any intention in existing circumstances, of taking steps for the nationalization of hospitals, may be expected, seeing that a falling off of the revenue to the voluntary hospitals at the present time would seriously threaten the national finances. But although nationalization of hospitals is far off, Sir George Newman, the chief of the Medical Department of the Ministry of Health, rightly says that it is obvious that a complete and satisfactory hospital system cannot be provided for many years. But he qualifies this statement with the pertinent remark that a beginning may be made. He points out that there is no general hospital system in Great Britain. Of course there are hospitals, and so far as the poor law institutions and the isolation hospitals are concerned, there is organization. But when it is a question of the general hospital system, it is unorganized and insufficient. The number of beds in the general hospitals per population is entirely inadequate, as are the beds for pulmonary and surgical tuberculosis, and the number of beds for early mental cases and for maternity cases.

Coordination, that is, unity of command, won the war for the allies and provided an object lesson for hospital management and for mobilizing the scientific force of the profession. Cannot methods of coordination be applied to the voluntary hospital system, rendering it more elastic and workable, without resorting to such a drastic reform as state control? By proceedings of this character the good ship "Voluntary Hospitals" might be brought safely into port. It is somewhat curious that hardly a voice has been raised in favor of introducing the American system of pay hospitals into this country. The hospitals of Great

Britain have always been for poor people and the working classes, while the great middle class had nowhere to go for skilled treatment. Therefore, persons with a small salary, as clerks, shop attendants, and those of a higher social scale, most of whom earned less than the competent artisan, were compelled to go for treatment to medical practitioners possessed of far less knowledge and skill than the physicians and surgeons who gave their services to the hospitals. To the unprejudiced it appears that the pay hospital system offers a solution of the problem in Great Britain, although no doubt many obstacles would have to be overcome.

In future letters, various phases of the hospital question in Great Britain will be presented and discussed. With regard to hospitals here, there is plenty to write about at the present time.

WANTS SANITARY SURVEY OF ENGLAND

An appeal for a sanitary survey of England, with a view to mapping out the land for the purpose of establishing local authorities which would direct all local energies pertaining to health, was made by Sir Napier Burnett in an address on hospital organization and management delivered at the Royal Infirmary. A similar survey, affording important data, had been carried out by the North-Eastern Hospitals Association in the north of England, in an area of about 4,000 square miles. The shortage of hospital beds had an important relation to the question of national economy by way of unemployment and lessened production, and was also a casual factor in the general social unrest. In reference to hospital finance, Sir Napier Burnett expressed the hope that soon King Edward's hospital fund, or some government subsidy, would extend its operations to Provincial hospitals, joining with the aid given some coordinated system of central control. Serious consideration should be given to the need of hospital accommodation for middle-class patients who were able to pay one, two, or three guineas a week for a bed in a general hospital.

ANTI-TUBERCULOSIS CAMPAIGN IN FRANCE

France is rapidly mobilizing her resources for a great post-war campaign against tuberculosis. During the five years of war, the disease made great inroads, particularly in the devastated regions, and the beginning of a serious campaign was made by the American Red Cross, while the war was still on. The campaign has enlarged gradually, the French government has taken it up, and now the Rockefeller Foundation has decided to extend its work along this line, particularly in the Chateau Thierry and St. Quentin areas, where more than half the old population has returned to the ruined villages.

The same methods adopted by the Foundation in America will be used in the fight, and close cooperation maintained with the American Red Cross and French relief agencies. The Foundation is at present furnishing the funds for the establishment of three centers, and will provide French doctors for them. French nurses, trained by the Red Cross will work with them.

In laying his plan before the Red Cross, Dr. Bernard L. Wyatt of the Foundation stated that by establishing the work in the larger cities first, he will be able to do more good at the start with a limited organization. Later, lectures and posters, demonstrations, and motion pictures will be used in an educational campaign in the small towns. More than forty French girls who have already had nurse's training have volunteered to assist.